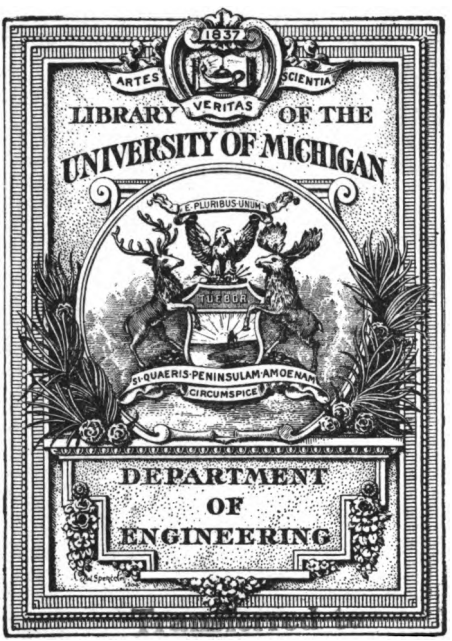


UPPER GREEN RIVER LAKE.

Fifth Biennial Report

—OF THE—

STATE ENGINEER

—TO THE—

GOVERNOR OF WYOMING

—FOR THE—

Years 1899 and 1900.

CHEYENNE, WYO.
THE S. A. BRISTOL COMPANY, PRINTERS AND BOOKBINDERS
1901

LETTER OF TRANSMITTAL.

Cheyenne, Wyoming, November 30th, 1900.

To the Honorable

DE FOREST RICHARDS,

Governor.

Sir:—As provided for in Section 107, Chapter VII, Revised Statutes of Wyoming, I have the honor to submit herewith a report of the work of this office for the two years ending November 30th, 1900, with such recommendations as, in my judgment, will increase the efficiency of the water laws and secure their better administration.

Yours very respectfully,

FRED BOND,

State Engineer.

TABLE OF CONTENTS.

LIST OF ILLUSTRATIONS.

LIST OF OFFICERS

IN CHARGE OF

IRRIGATION IN WYOMING.

Fred Bond ..... State Engineer.
A. J. Parshall ..... Assistant State Engineer.

DIVISION SUPERINTENDENTS.

W. M. Gilcrest, Superintendent of Water Division No. 1 and Secretary of the Board of Control, Cheyenne.
C. B. Holmes..... Sup't of Water Division No. 2, Sheridan.
B. B. Morton..... Sup't of Water Division No. 3, Ten Sleep.
O. A. Hamilton.. Sup't of Water Division No. 4, Rock Springs.

WATER COMMISSIONERS.

DIVISION NO. 1.

W. D. Pease..... Commissioner District No. 1, Cheyenne.
George W. Snow..... Commissioner District No. 2, Little Bear.
J. L. Jordan.... Commissioner District No. 3, Iron Mountain.
Price Jacobs..... Commissioner District No. 4, Laramie.
C. H. Jones..... Commissioner District No. 5, Laramie.
W. H. Mead..... Commissioner District No. 6, Fort Steele.
Horace Nichols..... Commissioner District No. 7, Collins.
J. M. Calvert..... Commissioner District No. 8, Dixon.
J. W. Price..... Commissioner District No. 11, Casper.
Alva Dixon..... Commissioner District No. 12, Rockdale.
D. A. Wucherer..... Commissioner District No. 14, Lusk.
S. A. Bishop..... Commissioner District No. 15, Douglas.
S. Slaymaker..... Commissioner District No. 16, Inez.

DIVISION NO. 2.

A. M. Nelson.....Commissioner District No. 1, Newcastle.
E. E. Miller ..... Commissioner District No. 2, Greub.
J. R. Hutton.....Commissioner District No. 3, Buffalo.
M. K. Wood.....Commissioner District No. 4, Sheridan.
C. J. Huntington.....Commissioner District No. 5, Dayton.
Adolphus Youkee.....Commissioner District No. 6, Slack.
John Pearson.....Commissioner District No. 7, Sundance.

DIVISION NO. 3.

A. P. Battrum.....Commissioner District No. 1, Lander.
L. P. Hudson.....Commissioner District No. 2, Lander.
C. E. Blonde.....Commissioner District No. 5, Embar.
C. E. Shaw.....Commissioner District No. 6, Red Bank.
F. S. Wood.....Commissioner District No. 8, Otto.

DIVISION NO. 4.

Chas. Rathburn,.....Commissioner District No. 1, Fontenelle.
John Shirk.....Commissioner District No. 3, Roberson.
W. H. Kennington.....Commissioner District No. 8, Afton.

REVIEW OF WORK

OF THE

ENGINEER'S OFFICE.

APPROPRIATION OF WATER.

The total number of appropriations of water made prior to the State laws and of record in the form of statements of claim is 3,649, made by 4,703 individuals and companies. The total number of permits issued since the enactment of the State water laws is 3,536; of these 601 are for enlargements or extensions of ditches previously constructed, the total number of individuals and companies interested in these appropriations under permits being 4,715.

The number of individuals and companies appropriating and using the State's waters on November 30th, 1,900, is 9,418. Nine hundred and eighty-five appropriations under permits have been perfected and 343 have been cancelled. Two hundred and seven applications for permits to construct reservoirs have been approved, seventy-seven of these having been issued during the past two years. During the year 1899 and to November 30th, 1900, 1,141 applications for permits have been approved and recorded, of which 927 were for original ditches and 214 were for enlargements, an increase of original applications over the two years previous of nearly fifty-two per cent., and in enlargements of over 30 per cent. Under the 927 original applications it is proposed to reclaim 507,156 acres at an estimated cost of $1,604,-195, or an average of $3.16 per acre. Under the 214 enlargement permits 52,803 acres are to be reclaimed at a cost of $83,581, or $1.58 per acre.

Thirteen applications for stock, domestic and railway purposes involve an outlay of $20,715, and sixteen applications for mining and milling purposes, an expenditure of $109,850.

FEES.

This office has received the following fees since the law providing for fees went into effect in 1895:

1895	$ 673.90
1896	910.80
1897	1,089.55
1898	1,098.80
1899	1,465.70
1900 to November 30th	1,800.50
Total	$7,039.25

These fees were formerly available for the payment of clerical services in the Engineer's office, but in the session of 1899 this law was repealed. The consequent cutting down of the available funds for the use of this office has seriously crippled its usefulness, and has resulted in postponing many surveys for which there is urgent demand.

SUMMARY OF CERTIFICATES OF APPROPRIATION

Issued by the State Board of Control between November 30th, 1898, and November 30th, 1900.

Division No.	NAME OF STREAM	Total No. of Appropriators	Total Volume Appropriated Cu. ft. per sec.	Acres Irrigated
1	North Spring Creek	16	67.47	4,730
1	Methodist Creek	2	2.27	160
1	Centennial Creek	4	6.48	455
1	South Spring Creek	26	60.55	4,072
1	East Branch of Spring Creek	2	11.35	760
1	Bates Creek	3	20.20	1,380
1	Brush Creek	1	6.86	480
1	Deer Creek	1	2.28	160
2	Cross Creek (Supplemental)	1		6,320
2	White Creek	1	.85	60
2	Jackson Creek	1	.01	1
2	Lytle Creek	1	3.40	210
2	Rapid Creek	1	1.07	75
2	Spring Creek	1	.04	3
2	South Red Water Creek	1	2.14	150
2	Seepage Water, Rock Creek	1	.28	20
2	Red Water Creek	1	.57	40
2	Spring Tributary Creek	1	.14	10
2	Sand Creek	1	1.14	80

SUMMARY.—*Concluded.*

Division No.	NAME OF STREAM	Total No. of Appropriators	Total Volume Appropriated Cu. ft. per sec.	Acres Irrigated
2	Little Goose Creek	1	.50	35
2	Beaver Creek	1	3.14	220
2	Piney Creek	1	1.29	90
3	Wood River	26	28.96	2,027.1
3	Meeteetse Creek	8	10.06	704
3	Dick Creek	1	.91	64
3	Rawhide Creek	1	2.64	185
3	Renneberg Creek	1	.21	15
3	Piney Creek	2	1.00	70
3	Brokenback Creek	1	1.07	75
3	Ten Sleep Creek	3	2.31	162.5
3	Owl Creek	23	54.98	3,866
3	North Fork Creek	3	10.74	751
3	Grey Bull River	181	440.20	30,814.22
3	East Timber Creek	1	5.14	360
3	West Timber Creek	1	.50	35
3	Timber Creek	1	2.28	160
3	Franc's Fork Creek	1	8.33	583
3	Pickett Creek	1	.64	45
3	Rock Creek	3	14.03	983
3	Four Bear Creek	1	5.06	354
4	Salt River	5	5.84	405
4	Dry Creek	5	6.13	430
4	Crow Creek	2	1.42	100
4	Black's Fork	2	3.74	257
4	Spring Creek	3	3.09	215
4	Lost Creek	1	6.85	480
4	South Piney Creek	1	.78	55
4	Big Piney Creek	1	.71	50
4	Willow Creek	6	5.65	395
4	Swift Creek	15	18.97	1,398
4	Cottonwood Creek	3	4.63	325
4	Anderson Creek	1	.28	20
4	Birch Creek	1	2.28	160
4	La Barge Creek	1	2.67	187
4	Smith's Fork	4	4.81	338

ADJUDICATION NOT COMPLETE.

Surveys were made in 1899 of all the ditches diverting water from the Laramie River and tributaries, with the exception of Little Laramie River and Soldier Creek. The proof of

365 individuals and companies has been taken, submitted to public inspection and will probably be acted upon by the Board at its next meeting. The area of land reclaimed is 184,688 acres.

DITCH SURVEYS.

During the year 1899, the ditches diverting water from Owl Creek and tributaries, Grey Bull River and tributaries in Division No. 3, and the Laramie River and tributaries, with the exception of the Little Laramie, a tributary heretofore adjudicated by the Board of Control, in Division No. 1, were surveyed and plats drawn. The surveys on Laramie River began in June, Mr. Wm. M. Gilcrest being engaged to undertake them, the Engineer and his assistant being engaged at the time in other work.

The surveys were prosecuted until October 1st by Mr. Gilcrest, and were thereafter completed by H. B. Carpenter and Edward A. Buck. The work was not finished until in December, the amount involved having proven to be greater than was at first anticipated. The surveys on Owl Creek began and were completed in August, by Mr. A. J. Parshall, Assistant Engineer. The work on Grey Bull River was executed by Mr. Parshall, assisted by Mr. J. Frank Warner and Mr. Sidney Blout, and was begun September 20th and completed November 13th, 1899.

OWL CREEK.

This stream forms the boundary line between the Shoshone Indian Reservation and Big Horn County. It rises among the mountains forming the southeastern end of the high divide jutting out from the main Shoshone Range, and separating the head waters of the Grey Bull River and tributaries on the north from the numerous streams forming the source of the Wind River or Big Horn River, as it is known after cutting the spur known as the Owl Creek Range, on the south. In Owl Creek are accentuated those differences between the flow of the flood season and that of midsummer which prevail in all Wyoming streams. During the spring months, there is a surplus above the requirements of the appropriators, but in an average year the supply practically ceases on July 1st, and thereafter there

THE DEVIL'S GARDEN, METEETSE.

is no water, a late priority being as valuable as one acquired many years previous. The number of ditches surveyed on this stream is twenty-six, having a total length of 55.6 miles.

GREY BULL RIVER.

This fine stream rises among the Shoshone Mountains forming the southwestern wall inclosing the Big Horn Basin, and flowing thence in a northeasterly direction, cuts that part of the Basin lying west of the Big Horn River in two nearly equal parts. It joins the latter stream in Township 52 N., Range 93 W., and has a total length approximating 135 miles. Of this length, that portion lying between the base of the mountains and its mouth, a distance of seventy-six miles, is largely settled with prosperous farmers. The valley varies from one-half to one mile in width, except in the vicinity of the town of Burlington, where it has a width of nearly six miles. The number of ditches surveyed was 129, having a total length of 358 miles. These ditches present no engineering difficulties and have been constructed by means of ordinary plow and scraper work. The utilization of the water supply has not, in all cases, been as economical as will doubtless hereafter obtain when it is fully learned that an over-supply of water is, in the end, vastly more injurious and unprofitable than a shortage of this necessity. That portion of the valley known locally as the Burlington Flats has had water run upon it in such quantities, and so persistently, that the application for a beneficial use has almost become an application to an injurious use, since the soil has become so saturated with water that the traveler is not safe from bogging down both in the high road and upon the fields. The resulting injury to the land by bringing large quantities of alkali to the surface is apparent, and if these fine flats are to continue in that productiveness which has heretofore been a prominent feature of this valley, either subdrainage or a more careful and economical use of the water must be resorted to. Conversation with a number of these farmers showed that the view was held to some degree that they had an insufficient water supply, but the appearance and condition of the soil indicated either a large surplus or a wrong application in time or method. This is not universally true, however, and, in those portions of the valley

where the slope toward the river is more rapid, larger quantities of water can be safely and profitably used than where the country is flat with slow drainage. The country around Burlington is exceptionally fine and adapted for the irrigation farmer, but even a casual observation will point out the necessity for greater care than is required in many less favored districts. As the Grey Bull valley presents some of the unprofitable features attending a wasteful use of water it also, in the upper end, by the best example known in the State, demonstrates the possibilities following a sub-drainage of alkalied soils, and the consequent return to a degree of fruitfulness not obtaining at any previous stage of the irrigation. This phase of future irrigation is discussed on another page of this report.

LARAMIE RIVER.

The first appropriator from the Grey Bull water shed dates his diversion back to the spring of 1881, but the first diversion from the Laramie River and tributaries antedates this by fourteen years, forty-six ditches having been constructed prior to the first appropriation in the Grey Bull valley. The appropriations from the Laramie River, and especially from some of its small affluents along the line of the Union Pacific Railway, are therefore among the oldest in the State. The irrigation is chiefly for hay, and the water is spread out over the broad and high rolling prairies, known as the Laramie Plains, lying west of the Laramie Mountains, and after cutting this range, over the lower and more productive mesas in the vicinity of Wheatland, where grain and vegetables are raised in abundance. The land susceptible of cheap irrigation along the Laramie is vastly greater in extent than is found along any other stream of equal size in the State. The reason lies in the fact that the stream is not walled in on either side by bluffs which limit the irrigable area and make ditch construction in carrying water outside these limits expensive. Such an expression as the "valley of the Laramie" is unknown in our local geography. The term would be a misnomer.

One tributary known as the Little Laramie River had been surveyed and its waters adjudicated in 1892. No further surveys were undertaken until 1899, when all ditches taking water

from the river and its remaining tributaries were surveyed and plats prepared. The number surveyed was 319, having a total length of 450.2 miles. These surveys were exclusive of the canals of the Wyoming Development Company and the Pioneer Canal Company, both of these companies having filed complete and acceptable maps in the Engineer's office.

Total ditch surveys in 1899 were as follows:

Owl Creek.....	26 ditches having a total length of	55.6 miles.
Grey Bull River	129 ditches having a total length of	358.0 miles.
Laramie River..	319 ditches having a total length of	450.2 miles.
Totals....	474 ditches having a total length of	863.8 miles.

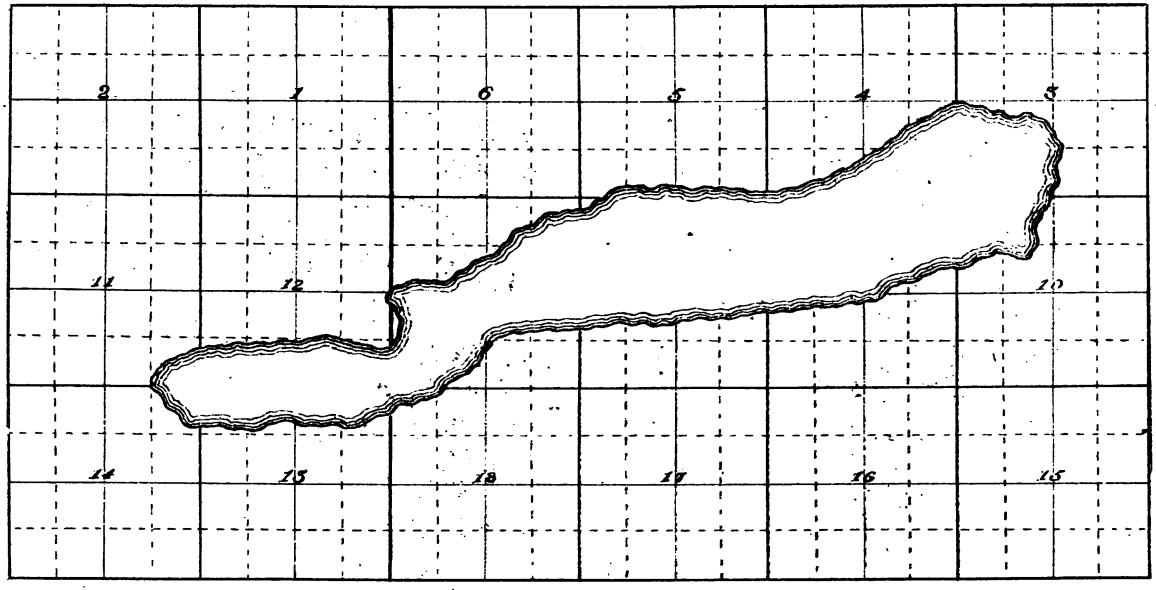
No ditch surveys were undertaken in the year 1900, on account of lack of funds for this work.

RESERVOIR CONSTRUCTION.

The subject of reservoir construction, to impound our flood waters, has become of widespread interest. The importance of retaining for our own use waters which now go to waste has always been recognized, but, owing to our possession of a supply heretofore approximating our needs, the problems connected with the question have been relegated to the future. This indifference cannot longer prevail unless we cease our agricultural growth.

As to the direction in which ou energies should be bent, no difference of opinion is found. It is agreed that only the General Government can undertake the work and carry it to a successful issue. The amount involved, while insignificant compared to the wealth created, is too great for private enterprise. In addition to this, reservoir construction for supplying water to others has not, as a rule, proven a profitable investment. On the other hand, impounding water by actual users has some discouraging features in that the impounded water and the land to be reclaimed are not adjacent. Transportation usually by way of a channel of a running stream, the waters of which are already over-appropriated, is the only way to get the water upon the land. This involves refined methods of administration, and private capital has refused to take the risks of a failure to secure the water after the expense of impounding it has been

BOULDER LAKE, A RESERVOIR SITE IN FREMONT COUNTY.



Superficial Area. 1,798 Acres. Capacity, 57,000 Acre Feet.

BOULDER LAKE.

met. That this fear is not founded upon experience so far as Wyoming is concerned, has thus far made no difference. Either the absence from our law of any special provision fixing the rights of the owner of a reservoir and providing for the distribution of stored water, or the fear that the water, after storage, would not be in sufficient demand to make the investment pay, has deterred construction work. But whether or not reservoirs are a paying investment, they are unquestionably necessary if development is to continue.

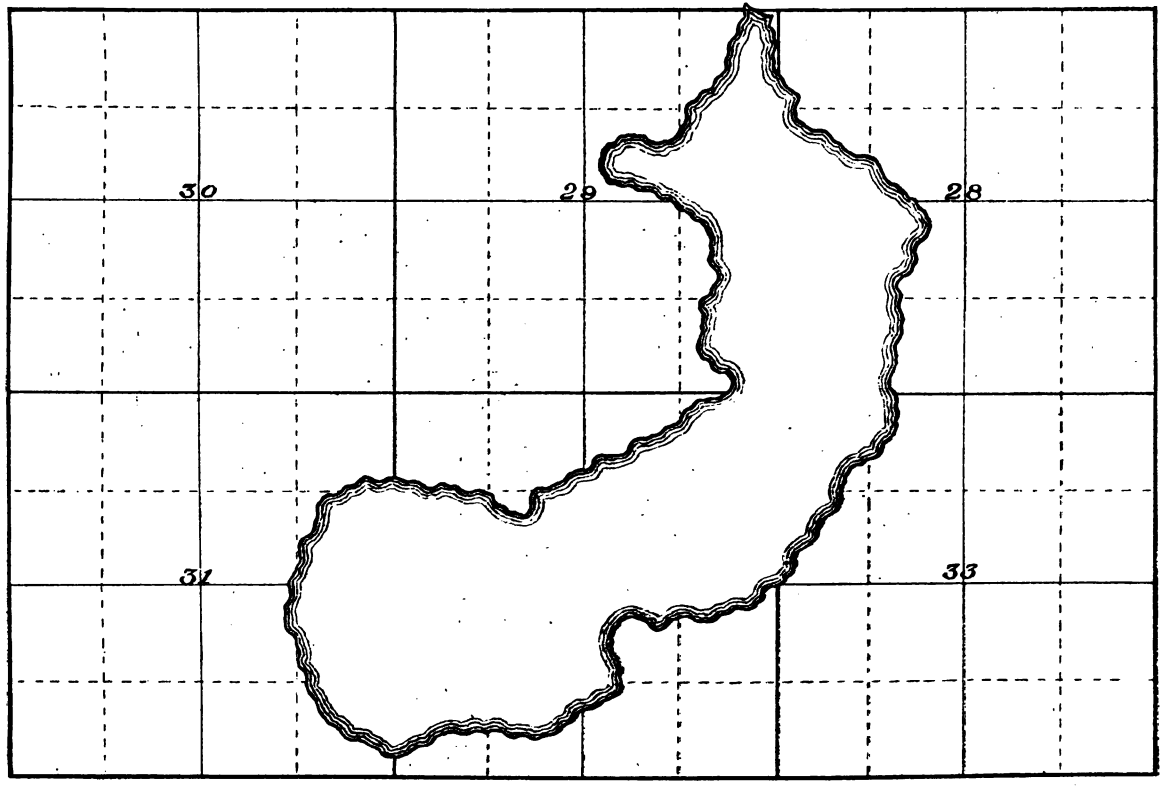
RESERVOIR SITES—BOULDER LAKE.

The opportunities for storing water cheaply in the Green River Basin are unsurpassed anywhere. Every affluent of New Fork, from the east, flows through at least one lake capable of being cheaply utilized to impound water for irrigation. The first of these examined was Boulder Lake, situated on Boulder Creek, in Township 33 N., Ranges 107 and 108 West. This lake is five miles long and from one-half to three-fourths of a mile wide. It has a superficial area at the present water line of 1,798 acres which it is estimated would be increased to 2,000 acres by raising the water surface a height of thirty feet. The volume of water impounded would not fall below 57,000 acre feet and would probably be nearer 60,000 acre feet. The water stored here would not be utilized on Boulder Creek itself, but could be taken out and distributed over the land lying between this stream and New Fork. It appears from the lay of the divide to the east that this water might be utilized in irrigating the large mesas lying west of the Big Sandy River and, if so, would be an extremely valuable adjunct to the irrigation which appears to be inevitable along that stream.

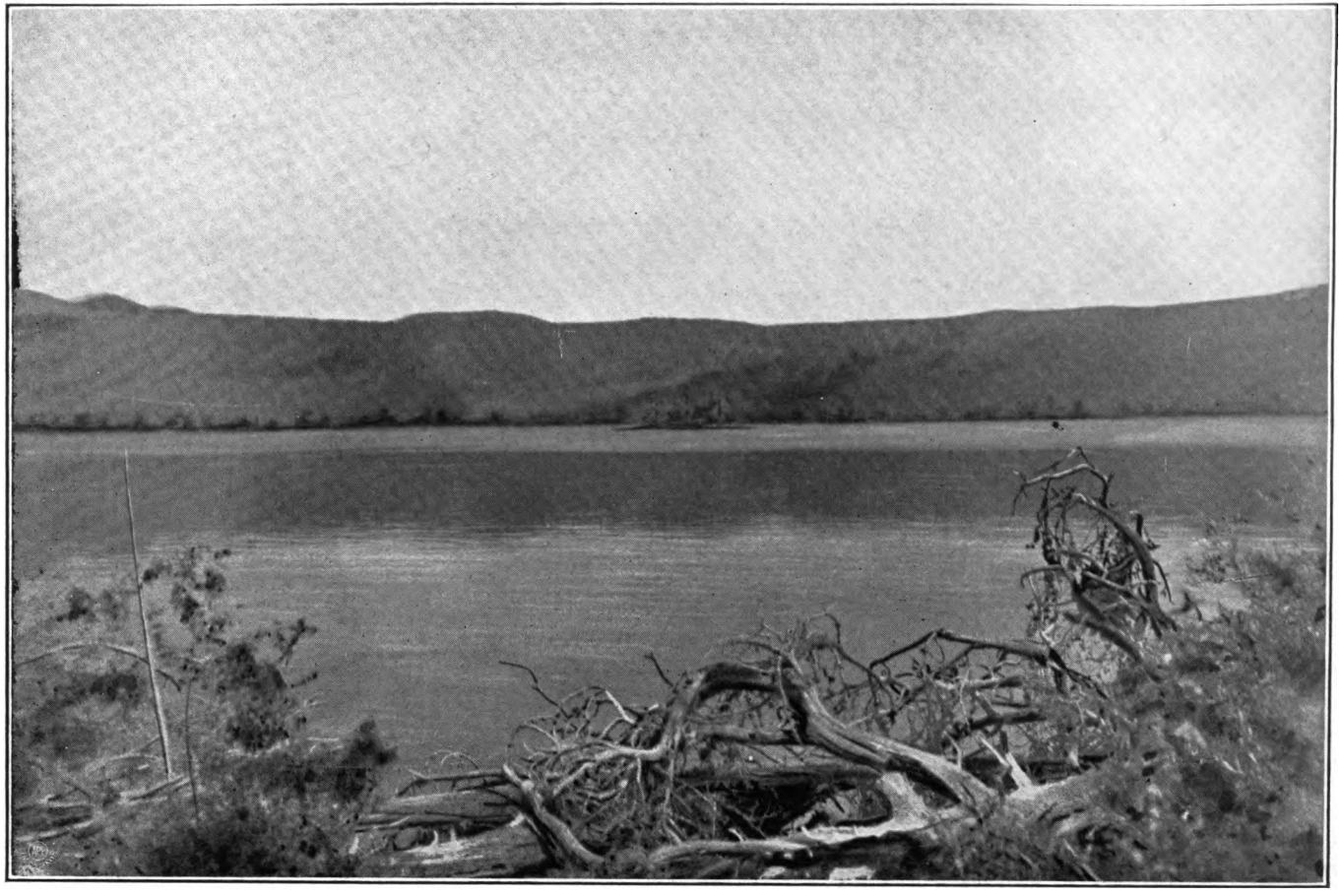
BURNT LAKE.

Just north of Boulder Lake, and at a distance of one mile, is Burnt Lake, situated in Township 34 N., Range 107 West. This lake covers an area of 808 acres, and water exceeding 17,000 acre feet could be impounded by raising the surface twenty feet. Fall Creek flows through the lake from end to end and forms its outlet. The water impounded here could be utilized

BURNT LAKE, A RESERVOIR SITE IN FREMONT COUNTY.



Superficial Area, 808 Acres. Capacity, 17,000 Acre Feet.



BURNT LAKE.

on land available under the storage in Boulder Lake, although a short ditch connecting Fall Creek with a gulch draining into Boulder Creek would be necessary if the water were diverted upon the Big Sandy mesas. Burnt Lake has a length of two miles and an average width of about one-half a mile.

MEADOW LAKE.

This lake is situated on unsurveyed land in Township 34 N., Range 108 West, and is on a tributary of Pole Creek. In size it is about the same as Burnt Lake, and will store an estimated volume of 15,000 acre feet.

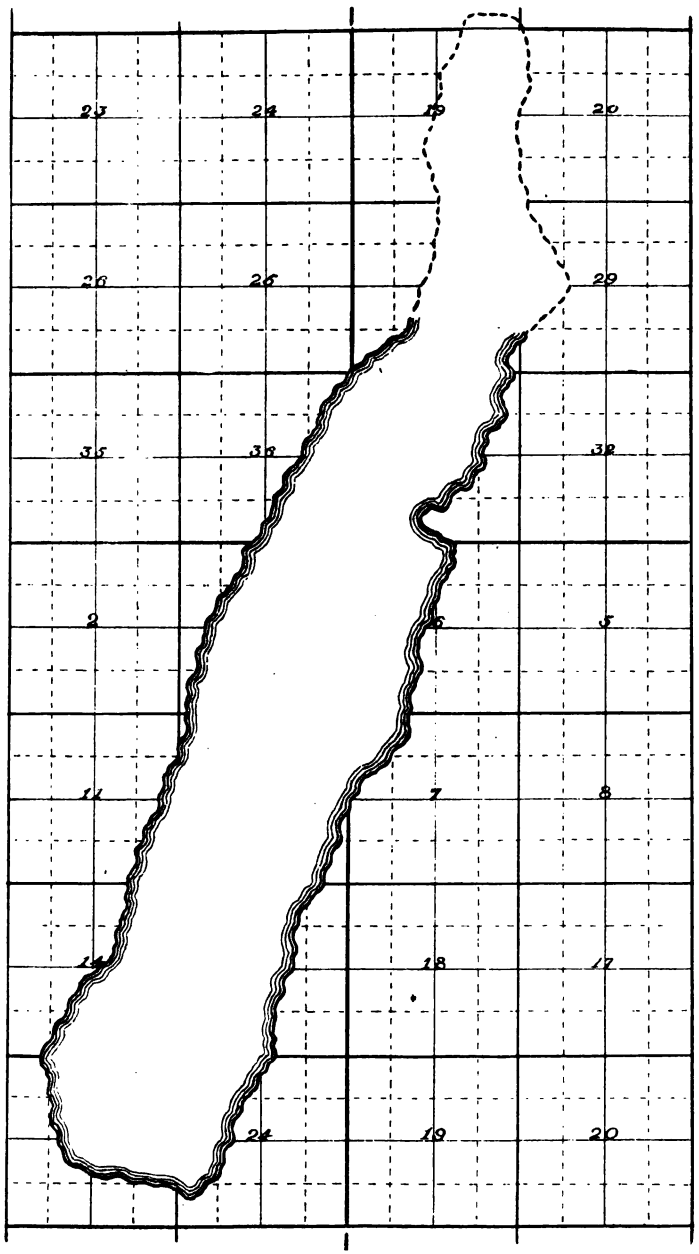
FAYETTE AND HALF-MOON LAKES.

These are both fine bodies of water, the latter being about four miles long and about one-fourth of a mile wide. Both are situated on Pole Creek, but being on unsurveyed land, the submerged area could not be given. From the appearance of these lakes viewed from the mountain side above them, 20,000 acre feet could be cheaply stored in the two.

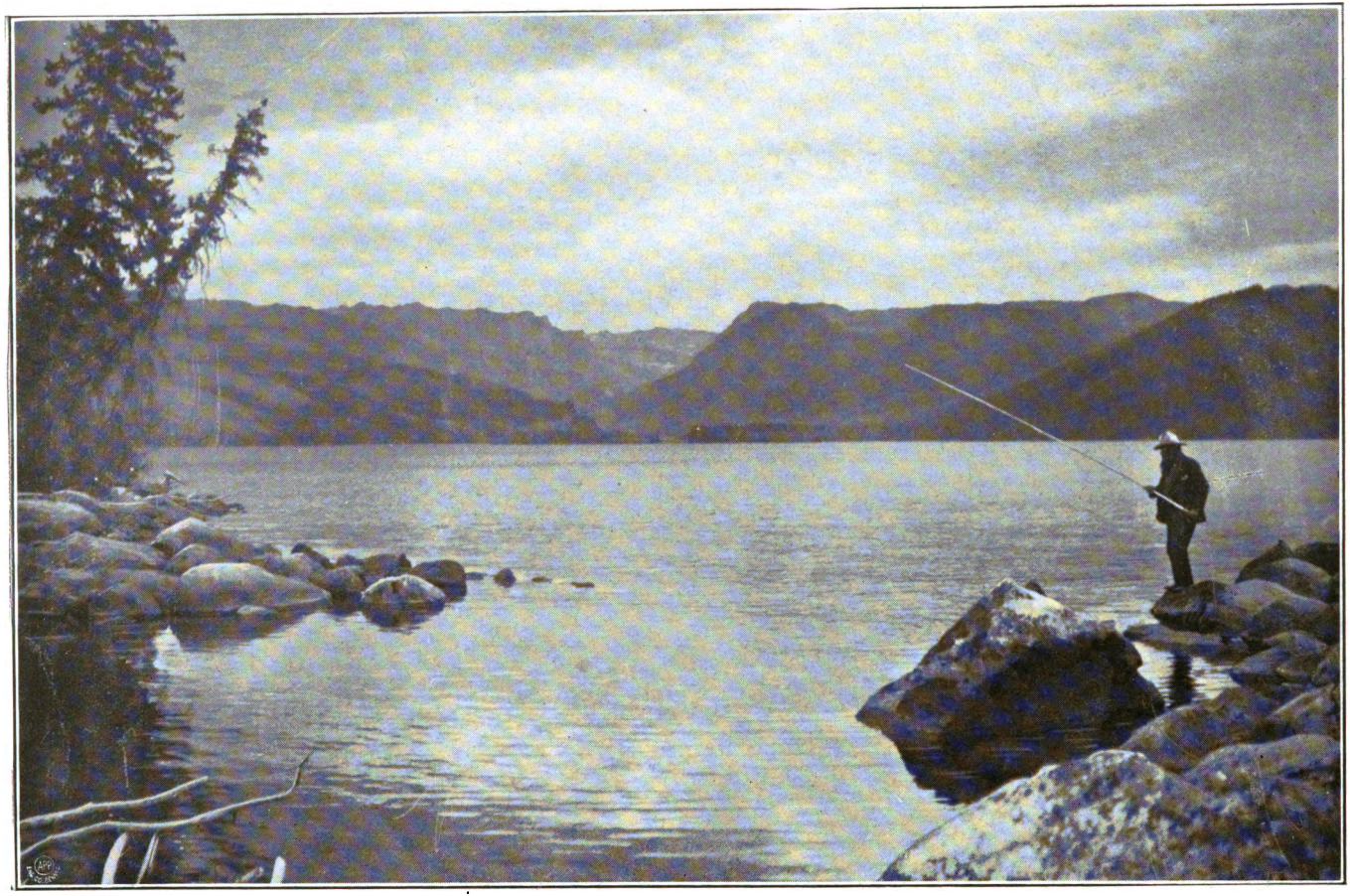
FREMONT'S LAKE.

This fine body of water lies in Townships 34 and 35 N., Ranges 108 and 109 West. Its area could not be determined on account of its upper end being on unsurveyed land. That portion which has been surveyed has an area of 4,262 acres. The level of this lake could be cheaply raised to a height of fifty feet above its present surface and would impound between 225,000 and 250,000 acre feet for irrigation. This lake is the largest in the State outside of the Yellowstone Park and Jackson Hole, and certainly is not exceeded anywhere in the depth and clearness of its blue waters or the wild beauty of its environments. It is situated just to the southwest of Fremont's Peak, the highest mountain in Wyoming, and Pine Creek, which rises at the base of the peak, flows through the lake from end to end. The length of the lake has never been determined, but is estimated by the ranchmen in that vicinity at twelve miles. The volume of impounded water, estimated above, is

FREMONT'S LAKE, A RESERVOIR SITE IN FREMONT COUNTY.



Area, 4,262 Acres. Capacity, 225,000 Acre Feet.



NEW FORK LAKE.

based on a length of only seven miles, but should the greater length be correct, upwards of 300,000 acre feet of water could be stored without increasing the height of the dam. Had this large volume of water with its attendant source of supply been located in any other water division, it is believed that investors would long ago have undertaken to make use of it and have taken their chances on being remunerated by the irrigator who becomes dependent upon it.

WILLOW LAKE.

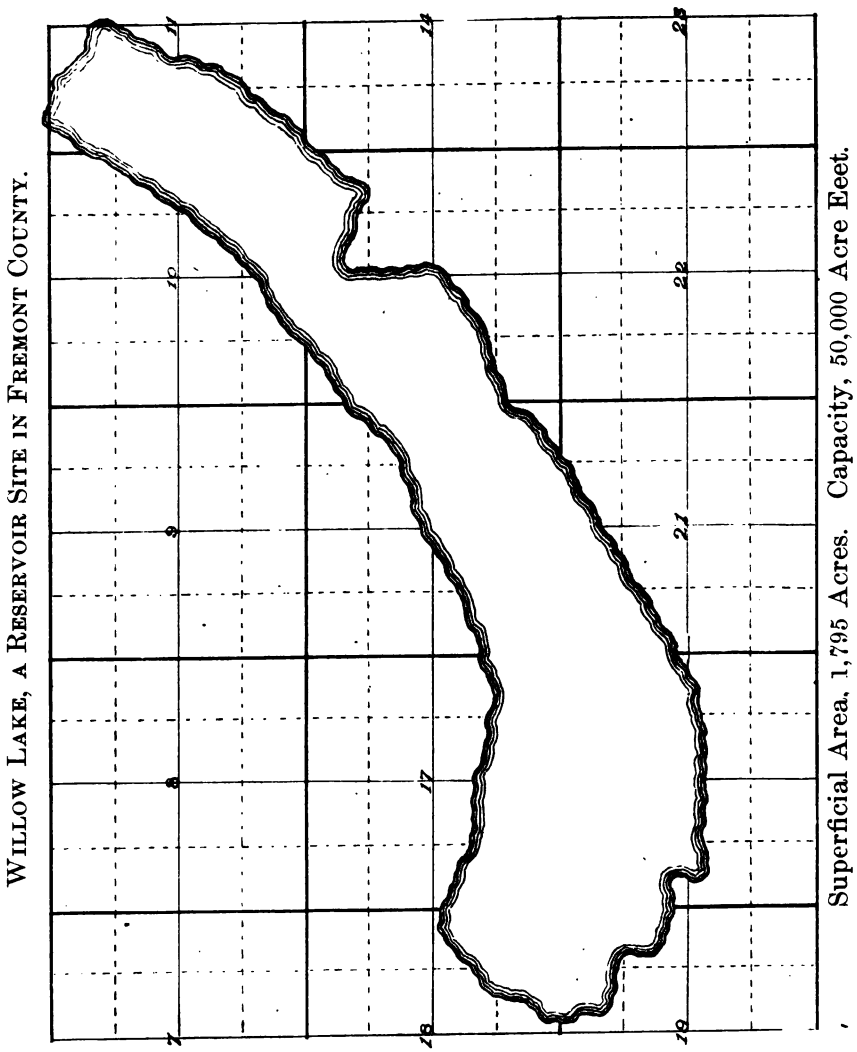
This lake is situated on Lake Creek, a tributary of Willow Creek, a stream flowing into New Fork, in Township 34 N., Range 109 West. It is about five miles northwest of Fremont's Lake. Willow Lake has a superficial area of 1,795 acres and presents the same advantages for storing water as prevail in the lakes previously described. A visit to the site for the dam was not made, but those familiar with it said it was the equal of any of the others. It is probable that a thirty-foot dam would impound over 50,000 acre feet of water.

NEW FORK LAKE.

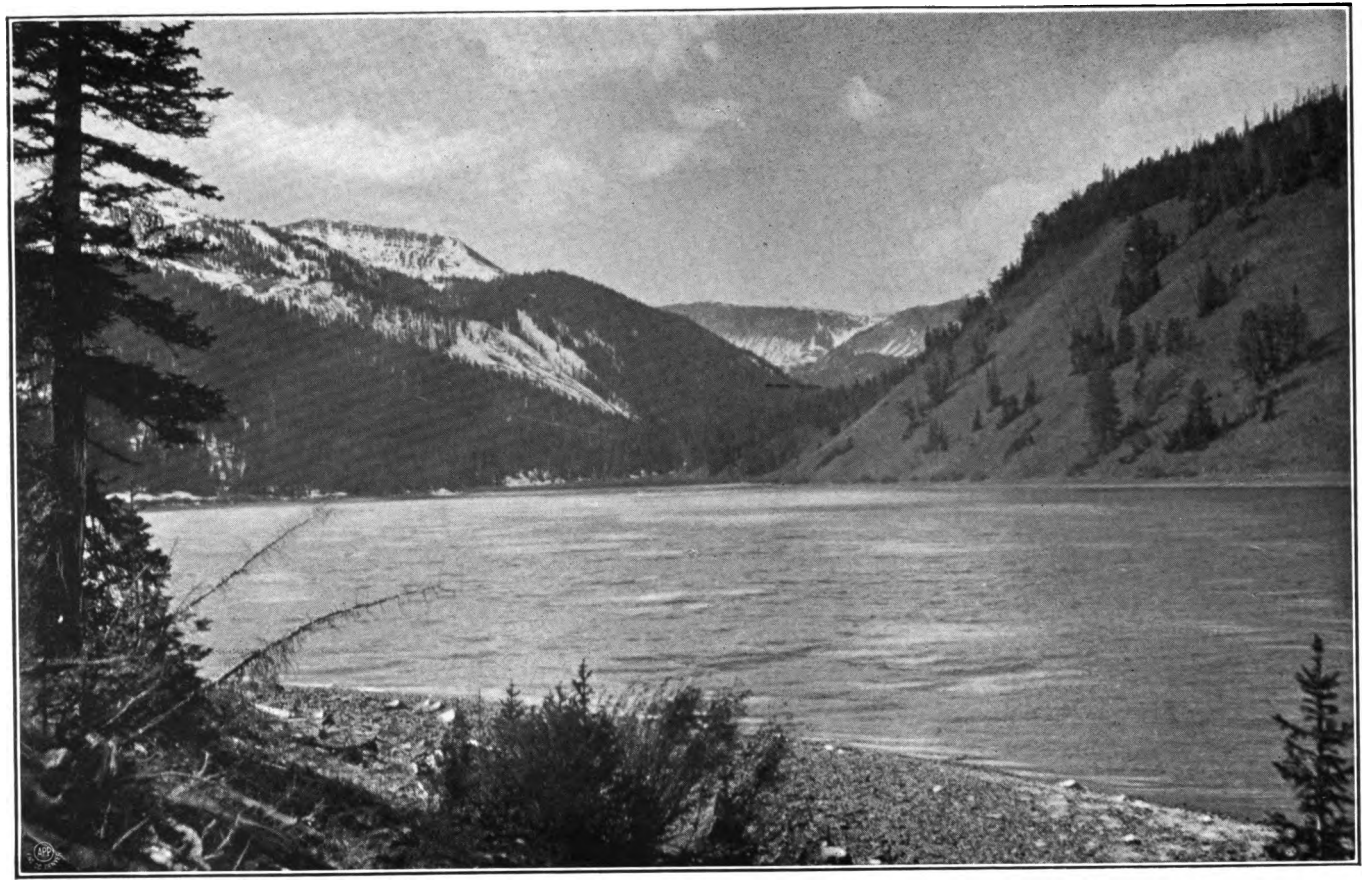
This lake is on New Fork River where the latter passes out of the mountains in Township 36 N., Ranges 109 and 110 West. It covers an area of 1,211 acres, and ranchmen on New Fork River, who experienced a shortage of water during the past season, are already making inquiries as to the steps necessary to store water here. An examination of the site for the dam, without actual measurements, indicated that the crest of a dam to store twenty feet of water would not be over 300 feet in length, and the material for its construction would not have to be hauled a greater distance. This would impound not less than 25,000 acre feet of water and would fill all the requirements of the lands along the stream.

The above eight lakes, with a total capacity of over 400,000 acre feet storable at a probable average cost of less than fifty cents an acre foot, are all tributary to New Fork River and to Green River below the junction of the two streams. As stated above, the opportunities found in New Fork Lake alone will

probably be sufficient to fill all the demands on that stream above the mouth of Pine Creek, and it therefore becomes a



question as to where the waters of the remaining lakes shall be utilized. Through the efforts of Judge Knight and Senator



NORTH PINEY LAKE.

Warren, a survey by the Hydrographic Department of the U. S. Geological Survey during the coming year has been secured to demonstrate whether the waters of these lakes may not be taken out through New Fork River and carried thence by suitable canal over into the water shed of Big Sandy River and used as a supplemental supply to reclaim the large areas on both sides of that stream.

NORTH PINEY LAKE.

A small lake on North Piney Creek in Sections 20, 29 and 30, Township 31 N., Range 115 W., having an area of sixty-four acres. The site for the dam is very narrow and a dam of a height of twenty feet could be cheaply built. It would impound 1,280 acre feet of water. The material for an earth and loose rock dam may be had within a short distance of the site. There is also a good site for a reservoir in the southeastern part of this township on the same stream. A low dam is already in use at that point for furnishing power for milling purposes. There were no data at hand for a determination of the capacity of this site for storing water, but it appeared to be the better of the two.

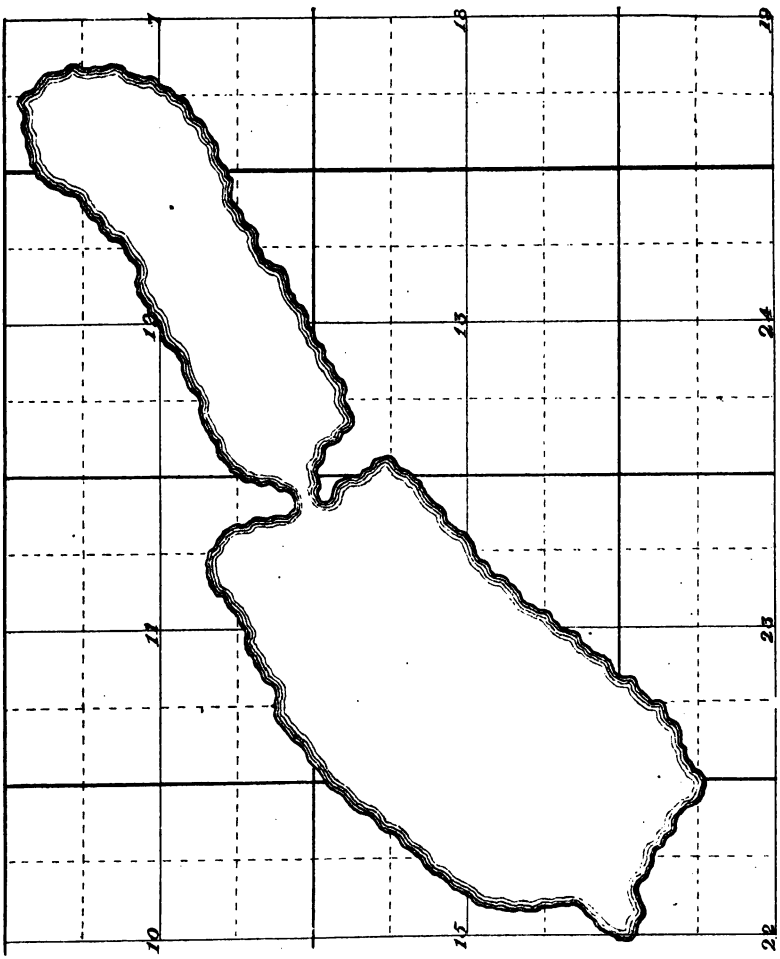
MIDDLE PINEY LAKE.

This lake is three and one-half miles south of North Piney Lake, and is a much larger body of water, covering 150.4 acres. A dam sufficiently high to raise the surface of this lake twenty feet would impound not less than 3,100 acre feet of water. The three available sites on the Pineys, so far as investigation has been carried, present possibilities for the cheap impounding of about 7,000 acre feet of water.

RESERVOIRS IN CONFLICT WITH PRIOR RIGHTS.

Complaint has heretofore been made to this office to the effect that a party who had constructed a reservoir across the channel of a stream was impounding water therein during a season of scarcity when said water should have been permitted to pass through the reservoir for the use of prior appropriators. It was claimed that the owner of the reservoir refused to open

the sluice-way through his dam, to the great injury of those who were entitled by virtue of their priorities to the use of this water. There having been no appropriation by the State to cover contingencies of this nature, the question as to whether or not the



owner of the reservoir could be compelled to build at his own expense such measuring devices as would secure an equal and fair distribution of water, as is contemplated by our laws, was submitted to the Attorney General, as follows:

Cheyenne, Wyo., April 10th, 1900.

Hon. J. A. Van Orsdel,
Attorney General,
Cheyenne, Wyoming:

Dear Sir—

I have been requested by an appropriator of water to make certain regulations regarding the distribution of water coming from a reservoir which has been constructed across the bed of a stream, and for the purpose of determining whether a regulation meeting the requirements could be enforced, I would be greatly obliged for your official opinion in the following:

If, acting under authority granted by Section 851, R. S. 1899, and for the purpose therein set forth, a Division Superintendent requires a necessary measuring device at some point in the stream itself, near or above the headgate of the ditch of the appropriator, is it the duty of the County Commissioners to construct such flume or measuring device under the same conditions as those under which they are required to construct these flumes and measuring devices in Section 930?

Very truly yours,
FRED BOND,
State Engineer.

Cheyenne, Wyo., April 11th, 1900.

Hon. Fred Bond,
State Engineer,
Cheyenne, Wyoming:

Dear Sir—

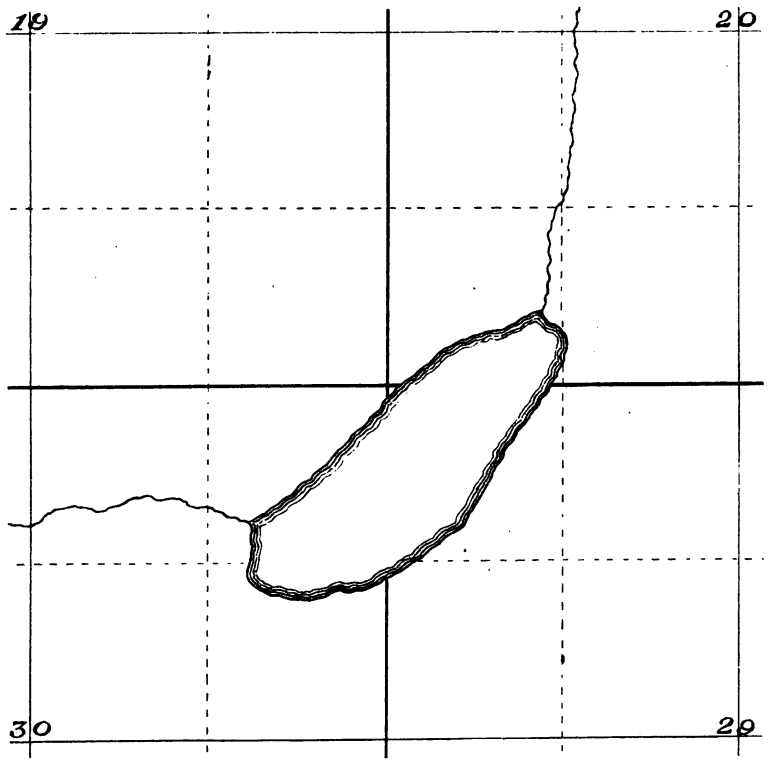
I am in receipt of your communication of April 10th, in which you submit, for my opinion, the following question:

* * * * *

Answering the above inquiry, I have the honor to advise you as follows: Section 951 of the Revised Statutes, 1899, authorizes the Division Superintendent to make such rules and regulations as he may deem necessary to secure the equal and fair distribution of the water of streams within his Water Division. These rules and regulations must not be in violation of the laws of the State. Section 930, Revised Statutes 1899, requires each appropriator of water to maintain a headgate and measuring device in his ditch at or near the point of diversion from the stream, and provides upon his failure to construct such headgate and measuring device the County Commissioners shall order one constructed and collect the cost of the construction of same from the owner of the ditch, in the same manner as delinquent taxes are collected. There is clearly no authority given the County Commissioners in this section to construct a measuring device in the channel of the stream and the County would have no lien for the construction of such device. There

is nothing in the law requiring the appropriator to construct anything outside of his ditch and the authority of the County Commissioners rests entirely upon the failure of the appropriator to comply with the requirements of the law. If the owner of the reservoir was the only appropriator, and used the channel

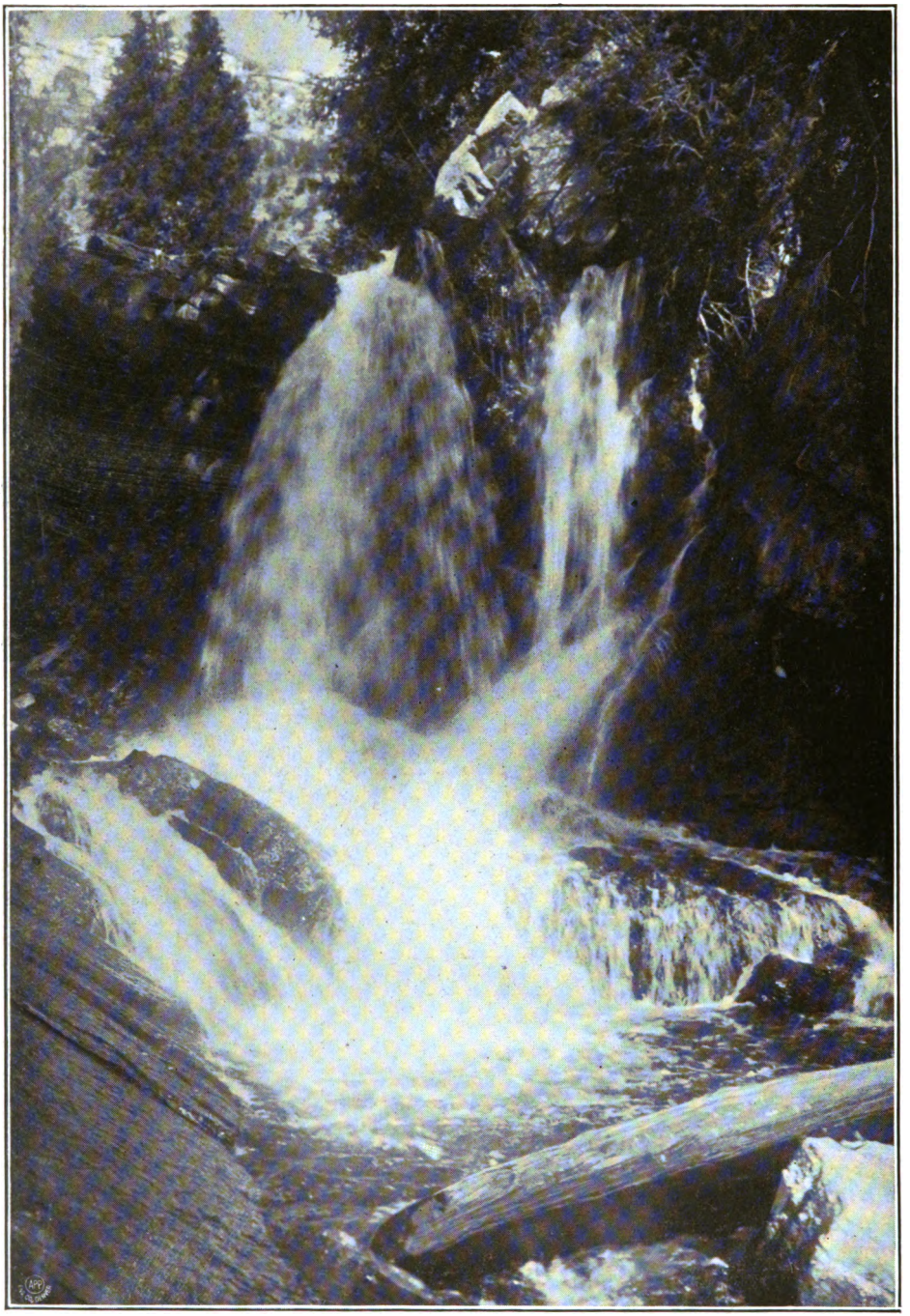
NORTH PINEY LAKE, A RESERVOIR SITE IN UINTA COUNTY.



Superficial Area, 64 Acres. Capacity, 1,280 Acre Feet.

of the stream for a ditch, it is possible the section above referred to could be made to apply, but when ditches are constructed from the stream, the law provides for the headgate and measuring devices to be constructed in the ditch and no other place.

I am therefore of the opinion that the sections of the stat-



CLEAR FORK FALLS.

ute referred to do not apply to the case set forth in your inquiry.

Very truly yours,
J. A. VAN ORSDEL,
Attorney General.

It therefore appears that where water is impounded in a reservoir, built across the channel of a running stream, the law provides no means whereby an equal and fair distribution can be made by those who are charged with this duty.

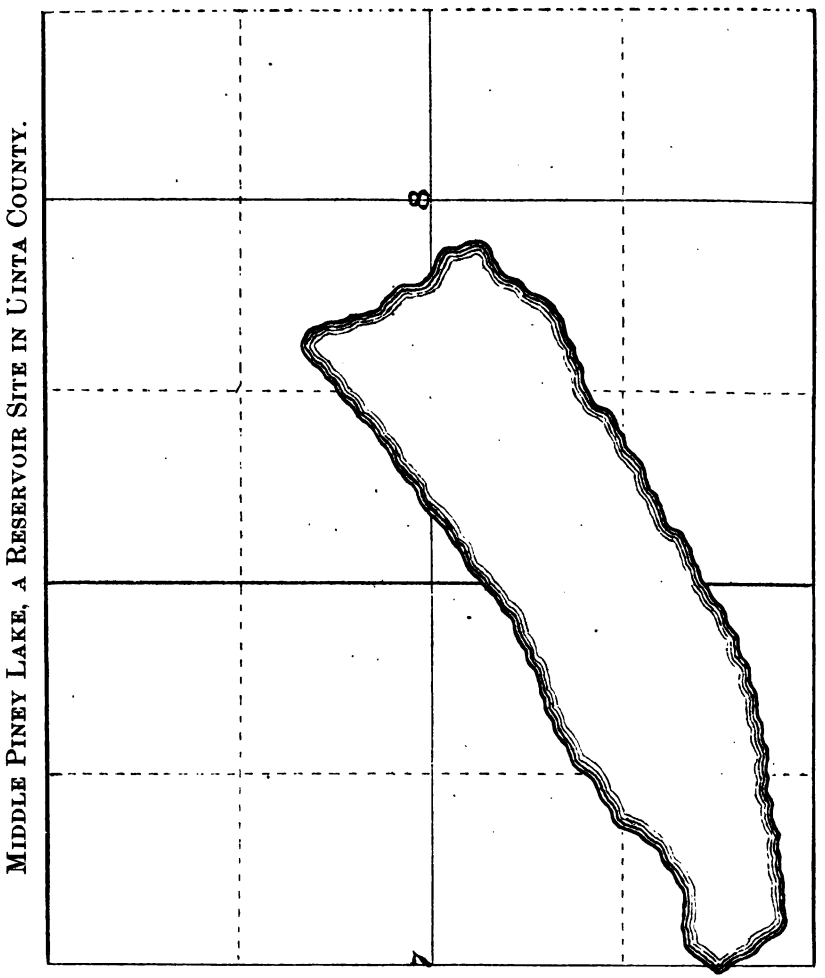
GREEN RIVER BASIN.

In his report for 1894, the State Engineer says: "A description of irrigation along the Green River and its tributaries is chiefly striking for the showing it makes of the opportunities which are unused rather than the value and importance of what has been accomplished." During the past six years, however, there has been a material change in the conditions prevailing along this stream, and especially is this true of the tributaries. The three Pineys are so nearly appropriated that the services of a Water Commissioner have become a necessity. This is true also of New Fork, the largest tributary from the east, and the number of applications for water rights, during the past two years, along other streams discharging into Green River, show that the adjudication of its waters should not be longer delayed.

Since 1894 permits for 189 ditches and canals to irrigate 62,343 acres of land, at an estimated cost of $93,471, have been approved for the Green River Basin and settlement has appeared to be more rapid during the past year than at any previous time. The total number of unadjudicated appropriations of water from Green River and tributaries is 303, comparatively few of these being from the river itself. There yet remains unappropriated water in some of the feeders, but at the present rate of appropriation, the official supervision of the division of these waters will soon become a necessity. Petitions have already been received asking the adjudication, and it is hoped the surveys may be undertaken in 1901.

During a trip over Green River Basin, in September, 1900, an examination and gauging of all the principal tributaries of the river was made. The object of the undertaking was to

learn, not only the condition of the water supply, but also to determine as far as might be without making actual surveys, the possibilities for conserving the flood waters. The streams were



all comparatively low, but none were dry, although Big Piney and its branches and New Fork, above its junction with Pine

MIDDLE PINEY LAKE.

Creek, the outlet of Fremont's Lake, were practically all appropriated.

The examination began at Big Piney postoffice, where North and South Creeks were both gauged. The discharge of South or Big Piney Creek on September 18th, 1900, was 1.3 second feet and the discharge of North Piney Creek 4.8 second feet. These streams, with the exception of flood waters, are practically appropriated, and the earlier appropriators complain of not being able to secure the water to which they are entitled. It appeared, however, that as the water shall become more valuable there may be a more economical use of it. The irrigation is chiefly for hay and an increased growth of grass for pasturage. Good potatoes are grown, although the crop is not uniform in quantity, and all kinds of garden vegetables that are produced at this altitude thrive here. The soil of the Big Piney meadow is a dark clay loam, but is impregnated with a considerable per cent. of alkali, which comes to the surface whenever too much water is used. The alkali has not, however, proven so injurious as in those sections of the State where the irrigation is for small grain, owing probably to the fact that the alkali deposits more rapidly on ploughed lands through more rapid evaporation of the water holding it in solution. The hay is all native, no attempts toward cultivating alfalfa having been made except one or two experiments on wet bottom lands, where the roots of the plants reached perpetual water at a depth of three feet. These experiments were not a success, though the first year gave great promise. The experiments have seemed to demonstrate that alfalfa dies as soon as the roots reach water, and agree with the experience of others in various parts of the State, although the failure may possibly be owing to other causes not known.

The lands along Green River, from the mouth of Big Piney up to the mouth of New Fork River, a distance of about ten miles, are practically uninhabited, although one small ranch was passed. The opportunities for irrigation are limited, such as were seen having been passed for the better locations further up both streams.

New Fork River was gauged at a point about three miles above its junction with Green River. Its width was sixty-eight feet and the flow was 74.3 feet per second. New Fork postoffice

is located on the East Fork of New Fork, just above the junction of that stream with New Fork River, and thirty miles from Piney Creek. The flow of East Fork at this point, on September 19th, was estimated at about eight second feet.

Boulder Creek, with a flow of three second feet; Fall Creek, with one-half a second foot; Pole Creek with 8.52 second feet and Pine Creek with a flow of 71.4 feet were successively crossed and gauged. Pine Creek, as the gauging shows, was far the largest of all these tributaries of New Fork from the east, a far larger and finer stream than New Fork itself, at the junction of these two streams, and should properly have been named as the principal stream. It is a roaring mountain torrent, even at the end of an unusually dry season. About five miles above the point gauged, it forms the outlet of Fremont's Lake. At Cora postoffice, about thirty-eight miles north of Piney Creek by direct stage route, New Fork carried not to exceed two second feet. It is in this section that some of the earlier appropriators were unable to secure water to which they were entitled during the past season. They appear practically unanimous in asking for an adjudication, and the matter will be laid before the Board of Control at its next meeting. Irrigation ditches obtain for about six miles above Cora postoffice, but no more were seen from Alexander to Wells, the latter being the last and farthest north of the postoffices on Green River.

From Wells postoffice to Green River Lakes, a distance of twelve miles, there is but little irrigation, although Mr. Robert L. Osborn, whose ranch is just at the outlet of Green River Lakes, has a few ditches in use. The irrigation is for hay alone.

Green River Lakes are two in number, and are situated just within the Wind River Mountains, the point where the river leaves the lower lake being also the point where it leaves the mountains. A gauging of the river, a few hundred feet below the lower lake, gave a flow of 89.4 second feet.

The scenery in the vicinity of Green River Lakes is very fine, being equalled, as is claimed by those familiar with both sections, only by that in the Yellowstone National Park, and surpassed nowhere in Wyoming. The altitude of the lakes, by aneroid, was 8,100 feet.

The examination of the streams discharging into Green River from the west was made on the return. Beaver Creek,

LOWER GREEN RIVER LAKE.

below the junction of its three branches, had a surface width of twenty-six feet, but was shallow. It gave a flow of twenty-five second feet. Horse Creek was gauged at the ranch of T. E. Andrews, in Section 11, Township 34 N., Range 112 W., and gave a flow of 11.8 second feet. North and South Cottonwood Creeks were gauged in Township 33 N., Range 112 W., and gave flows of 15.7 and 17.7 second feet respectively. The latter four streams are rapidly settling up, sixteen permits for new ditches having been approved in the past few months. The surveyors' stakes, locating the proposed Yellowstone branch of the Burlington Railway, were conspicuous along and running up the Middle Fork of Beaver Creek, whence they cross the divide and pass down Hoback Basin on the west and on into the Jackson Hole country. The construction of this road will lend a new impetus to irrigation in this section, and will cause a rapid influx of population and a material increase of wealth of all kinds.

Green River Basin, from La Barge Creek to its northern limits, is devoted to the raising of horses and cattle, sheep being unknown, except for very short intervals. The grass here is comparatively plentiful and does not show the over-feeding and over-stocking of the country south and east of La Barge Creek. It is, on the whole, fine grazing country, and while, on account of the altitude, it will never show the diversified farming of those sections of the State which enjoy an equal water supply and a much lower altitude, there is every reason to believe that it will not be any the less prosperous nor its people less happy and contented.

WATER FOR LIVE STOCK.

The crowding of the public ranges with live stock, consequent upon advancing prices of meat and wool, together with the leasing by the State of school and other lands for grazing purposes, has introduced some new questions for solution by this office.

Between the wishes of the applicant for stock water on the one hand and the interests of the public on the other, both being recognized as factors for the consideration of the Engineer

in the law defining his authority, it often becomes a serious problem just how far the one may be granted without materially interfering with the rights of the other.

The gravity of the question is enhanced by the fact that, in most cases, the amount desired for stock water is so small that it is not susceptible of measurement by the methods usually and necessarily employed in determining the volumes used for irrigation.

A flow of one-tenth of a cubic foot per second is measurable, though with difficulty, and a hundredth of a foot would be absorbed by the soil in the ditch before it had gotten out of sight of the headgate, yet the latter volume is equivalent to 6,500 gallons per day and is sufficient to water all the stock of the average Wyoming farmer.

The conduit by means of which all these appropriations are carried, when diverted from their course at all, is necessarily an open ditch constructed in soils of varying degrees of permeability to water and subject at all times to the large evaporation of the arid region, so that even were sufficiently refined methods of measurement adopted at the headgate, the economical transportation of stock water alone becomes extremely precarious, if, indeed, possible.

Applications for stock water have, heretofore, been largely made in conjunction with applications for irrigation purposes, and were generally confined to those cases where the land to be irrigated lies at some distance from the natural stream from which the diversion was made. During the past two years, however, owing to the increasing value and scarcity of water for range stock, many applications for the control of springs upon the public domain, for stock water, have been received. But in all cases wherein a grant of a monopoly of water carried with it a monopoly of a portion of the public domain, not otherwise obtainable and to the enjoyment of which all citizens are equally entitled, the proposed appropriation has been uniformly held as against the public interests and the application refused. In those cases, the application for permit has been returned with the following endorsement, which was at the same time made a matter of record in the Engineer's office: "This application is returned without my approval for the reason that the spring sought to be appropriated is upon the public domain, and a mo-

nopoly of its waters for stock purposes by the applicant is detrimental to the public interests."

LIMITATIONS AS TO TIME.

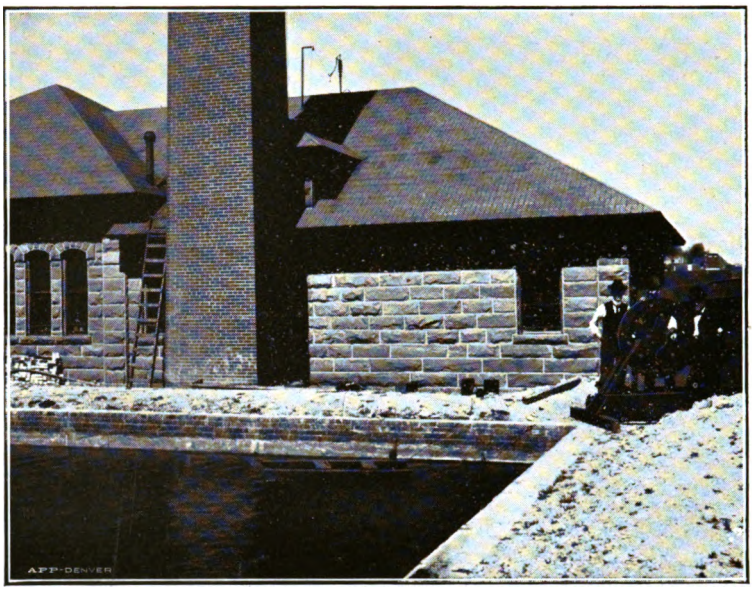
In applications to appropriate water for stock upon lands owned by the State, it has also been found necessary to consider certain factors which do not obtain in applications for irrigation purposes. In such cases, the interests of the State and the interests of the public are treated as identical, and it is held that to give an individual lessee of such lands perpetual control, for stock purposes, of the only water found thereon, is to invite an immediate surrender of his lease with the certain consequence that no one else would apply for it, the presence of water being wholly responsible for the application to lease. Whoever controls the water owns the land. On the other hand, a lessee who has entered into contract to pay certain rentals to the State for a term of years, for the use of State lands, and has made application for water thereon, is entitled to and should receive proper protection against appropriation by others. With the purpose, therefore, of protecting the State against the destruction of values in its leased lands by any ruling of this office and at the same time to secure a lessee in his actual necessities, thereby providing for a continued and perpetual income to the State, permits of this class have been approved with the following limitation: "The use of water sought to be appropriated in this application is from and upon the lands of the State of Wyoming, and the right to such use for the purpose named in this permit is granted only until the lease of lands is surrendered by the lessee or is abrogated or cancelled, in any of which events this permit shall at once lapse and become void." This limitation of the right to use water might possibly have been secured by requiring the appropriator to use the water in situ, but the question as to his right to continue in its use after the lease has passed into other hands was avoided by the method of limitation adopted. There has, as yet, been no complaint against this time limitation, many of the appropriators stating, at the time of filing their application, that they only desired protection while paying rentals on the land, and would have no use for the water when the lease should pass into other hands.

IMPOUNDING STOCK WATER.

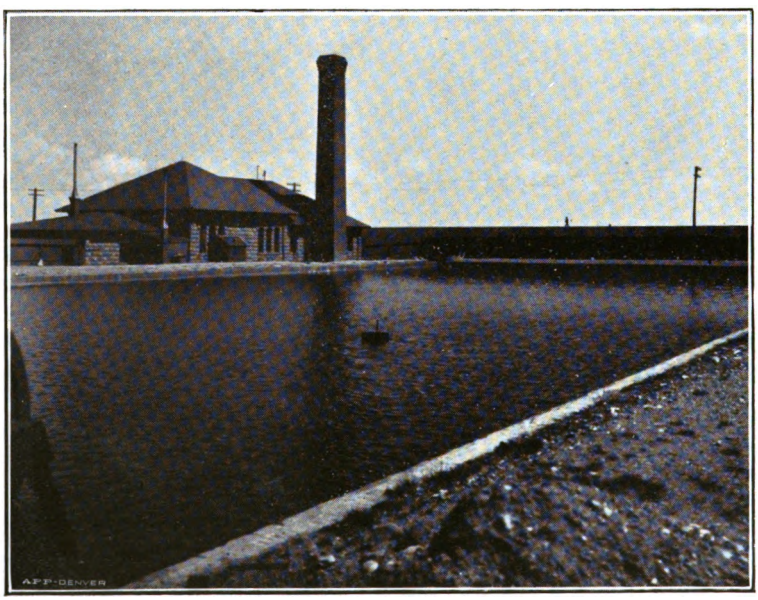
In many parts of the State, the only water now available for appropriation is the volume of so-called surplus water, which fills the streams at the time of the spring floods, and application to impound the same for a beneficial use has always received encouragement by this office. These waters cannot, however, be longer considered as either surplus or waste waters, and their economical distribution and use has become as much a part of the care and duty of the Engineer as any other waters under his supervision. The volume necessary for irrigation purposes is comparatively so large that difficulties in securing flood waters arise very largely through the scarcity of suitable sites for their safe storage within the necessary limits of cost. Rarely, if ever, has an application to impound water for irrigation been filed in the Engineer's office where the volume impounded was sufficient for the entire needs of the lands to be irrigated, the large majority being for a supplemental supply in times of scarcity or drouth. Applications to impound water for stock purposes, for reasons heretofore given in regard to making appropriation through ditches, require a more careful consideration and scrutiny if there is to be the same economical use of these floods as is required of the streams' average flow. It has been the aim of this office to secure this as far as possible, and when application has been made for stock purposes, inquiry as to the number of stock to be watered has been made of the applicant before his application has been passed upon. The volume to be impounded under his permit is then limited to the needs of the number of stock for which application is made. The result—a sufficient supply for the use of the applicant and water still left for the use of others.

UNDER-DRAINAGE OF IRRIGATED LANDS.

The capital and energies of the Wyoming irrigator are now devoted to getting water upon the land. The ditch must be built, the appropriation must be made, and the land reclaimed. To most irrigators, especially in the beginning of their undertakings when land is cheap, this is the whole problem. Along many of our streams, however, an occasional field whitened with



METER GAUGING STATION, CHEYENNE.
U. S. Dept. Agriculture.



METER GAUGING STATION, SHOWING METER IN TRANSIT.

alkali and overgrown with foxtail hints of the near approach of other questions which must soon engage the thoughtful attention of the farmer.

All Wyoming soils are impregnated with alkali. It varies in amount, but there is no section so free from it that an improvident and wasteful use of water will not bring it to the surface and greatly injure the soil.

In many parts of the State, especially in the more narrow valleys having a rapid slope toward the stream, a careful application of the water may put off the evil day indefinitely, but in others the farmer is already perplexed by the alkali problem. The abandonment of his claim and subsequent settlement on a new one, assuming that water could be transferred from the old to the new land, determines nothing; for in the same length of time which it took to ruin the old claim, the new one will be in like condition.

Moreover, the irrigation of the new tract will, in each successive move, be more expensive than the old, the lands first to be irrigated being those nearest the stream. At best, the change involves a new home building, far more expensive than the first one and by those, too, who have already exhausted their rights under our land laws. Ultimately, the irrigable lands are all taken up, and the farmer, under conditions far harder to surmount, is compelled to employ the same methods for reclaiming his reclaimed lands as might have overcome the difficulties in the first place. He is not the only loser either, for the State, in the first place, in the abandonment of its best irrigable lands along and near the streams, will have suffered immeasurable loss.

It is evident that such an outcome is not possible where the water is attached to the soil, since there is then every incentive to protect and improve the holding and no inducement to make a change. Nor is a change necessary. Practical experience has demonstrated that no land can be ruined beyond redemption by either water or alkali. Commenting upon the possibilities of reclaiming alkali lands in Utah, Prof. Whitney of the Department of Agriculture, speaking of the large tract of alkali lands lying between Salt Lake City and the lake, says: "Adequate artificial drainage is the only practical means of reclaiming the lands and providing against further disaster." He estimates the

value of eighty square miles of this land, if thoroughly drained, at three millions of dollars. At present they have scarcely a nominal value.

We have, however, and much nearer home, a practical demonstration of what may be accomplished by under-drainage. The farm of Mr. Otto Franc, on Grey Bull River, like many others along that stream, early gave evidence of the presence of alkali in the soil and in such amounts as to greatly impair its value and threaten its final ruin. Sub-drainage was undertaken as a possible remedy and with results exceeding the expectations. The drains were made by nailing together three two-inch planks in the form of a flat-bottomed trough, the sides being prevented from falling in by nailing to them cross cleats a few feet apart. These troughs were then inverted, placed end to end in the bottoms of the drains and covered with earth up to the surface of the ground. The trenches to receive the drains were cut about three feet deep.

The water which at first flowed from these drains was strongly impregnated with alkali, but alkali being soluble in water has rapidly leached out of the soil, and from the mouth of each there now flows a living stream as soft and sweet as the waters coming direct from the Snowy Range above.

The owner of this system has found in it another use of great economic value in that the water, even in the coldest weather, does not freeze for a considerable distance from the points of discharge. These places are consequently the daily resort of the live stock of the place, the water being preferred to that of the river. The old daily task of chopping and keeping open holes through the ice in winter has been abandoned, a bountiful supply of softer, purer and better water being always at hand and just at the points where it is needed most.

France and Italy have laws governing under-drainage of irrigated lands and they are a necessary concomitant to the irrigation laws of those countries. That the subject will one day become of sufficient importance to demand legislative action in Wyoming there can be no doubt. Lands now being irrigated were virgin prairie only yesterday, so the need of regulations to govern the disposal of seepage water has not as yet been felt. Just so soon, however, as the lower lands become seriously affected by the leaching out and depositing of the alkali up-

FIRST GRADING ON THE BURLINGTON, BIG HORN BASIN, MAY, 1900.

on them from those above, there will be discovered the need of a provision for the care and disposal of these waters by those responsible for their presence. Cheap surface ditches will in most cases answer the purpose and the largest part of our lands, on account of the naturally steep slope of the surface, will never need artificial drainage. The subject is mentioned here for the purpose of pointing out a cheap and effective way of reclaiming those whitened spots that are the despair of our farmers.

RECLAMATION UNDER CAREY ACT.

During the past year, applications have been filed with the State Board of Land Commissioners for the segregation of 87,000 acres of land to be reclaimed under the Carey Act. In addition to this, a contract has been let by the Board for the reclamation of 17,755 acres, previously segregated, but never reclaimed, the company undertaking the work having failed to fulfill their contract.

Of the larger tract, 78,747 acres lie under and are to be irrigated from the Cody & Salisbury Canal. These lands are principally on the north side of the Shoshone River. Under the Bench Canal, which diverts water from the Grey Bull River, 3,610 acres are to be reclaimed. Fifteen hundred and twenty acres are to be reclaimed under the Sage Creek Canal, which is projected to utilize waste and seepage water from the Burlington and Bench canals; 320 acres lie under the Fisher Ditch, taking water from Pole Creek, a tributary of New Fork River, in Fremont County, and 3,323 acres of additional lands lying under the Sidon Canal, formerly the Cincinnati Canal, to be reclaimed in connection with the 17,755 mentioned above. The last two tracts, amounting to a total of 21,078 acres, are adjacent and will be reclaimed by the Big Horn Colonization Company, through the Sidon Canal. Work was begun on this canal in May, 1900, and is being pushed rapidly to completion. There is no doubt but that all the lands susceptible of irrigation under this canal will be reclaimed prior to August 18th, 1904, when operations under the Carey Act expire by limitation.

There is also every reason to believe that the several smaller tracts above mentioned will have been reclaimed, or be fully

prepared for reclamation, as the law requires, before the expiration of the time limit.

As to the 79,000 acres under the Cody & Salisbury Canal, persistent effort supported by sufficient capital to keep a large force at work during seasonable weather, can put this project in condition for official inspection by August, 1904, but no report has as yet been received on the volume of work accomplished during the season.

The reclamation of these lands can only be secured by the expenditure of a large amount of capital. They are therefore beyond the reach of the settler or any possible combination of settlers. On this account this undertaking and others of like magnitude should be given ample time in which to make a success of the work. The operation of the Carey Act should be extended twenty years beyond the present limit, as it is believed that such extension can injure no interests, but on the other hand, will be a much needed encouragement to reclamation on a scale soon to be found necessary.

That the Carey law has not as yet been productive of large reclamation of lands in this State may be admitted without in any way reflecting on that law as an incentive and encouragement to those who would build canals. It protects the canal builder as well as the settler under the canal, and sparse settlement, with the consequent small demand for the products of irrigation farming has undoubtedly been the chief factor in deterring undertakings under this law.

Small ditches constructed, owned and operated by the individual for the irrigation of the homestead, or desert entry, are so absolutely the rule as to be almost without exception. All the irrigable lands cannot, however, be reclaimed by the small ditch. There are many fine tracts of land of from 20,000 to 100,000 acres each which can be reclaimed only through large expenditures of capital, and a law under which enterprises of this magnitude may be prosecuted, and which gives sufficient time for the work, should continue to hold a place in the U. S. Statutes.

The tract of 75,000 acres south of Ft. Steele, in Carbon County; the 200,000 acres along the Big Sandy River, in Sweetwater County; the 200,000 acres along the Powder River in Johnson County; the body of land of unknown extent, because

BRUSH CREEK, CARBON COUNTY.

not hitherto surveyed for irrigation, lying north of the Platte River in Natrona and Converse Counties, are examples of lands that can be reclaimed only through such expenditures of capital as put them beyond individual effort.

WATER RIGHT DECREE BY THE DISTRICT COURT.

This case was an action brought by the Little Horse Creek Irrigation Company for the purpose of preventing the defendants, George D. Johnston, et al., from diverting into their ditch water which the plaintiff claimed to have purchased from the Springvale Ditch Company.

The right of the Springvale Ditch Company was prior to that of the Johnstons, while the right of the Little Horse Creek Irrigation Company was a later right, and as the stream did not, at all times, furnish sufficient water for all appropriators, the Little Horse Creek Irrigation Company sought through this suit to establish the legality of a sale and so secure by purchase what it failed to secure by appropriation.

If the opinion handed down with the decree in this case is correctly apprehended, the Court holds the following:

1st. That the right to water is a vested right and its extent must be determined by the statutes in force at the time of the appropriation.

2nd. The right to the use of water was a property right, the title of which was vested in the appropriator and could be sold and disposed of as other property.

3rd. That a water right acquired for irrigation prior to the creation of the Board of Control may be used on any lands whatsoever, at the will of the appropriator.

4th. That an appropriation of water in an amount or volume not to exceed a certain defined limit, is in fact an appropriation complete and in full to that limit, regardless of the necessities of the soil.

In consideration of the fact that the doctrine and decrees of the Board of Control during ten years' administration of the water laws, so far as the same relate to private ownership of water, are overthrown by this decree if the same shall stand, a presentation of such portion of the laws under which the appropriation of the Springvale Ditch Company was made as have

any bearing on the ownership of the water and limitations as to the land, together with the decree of the Board in this case, will be of interest. Preliminary to this it may be stated that the Board has, at all times, held that our laws make no provision for the sale of water; that the laws nowhere recognize private ownership in water or its use, that in the absence of legislation recognizing private ownership and authorizing the sale of water or the sale of its use, it has been the intent of our lawmakers to sanction neither. The Board has, therefore, uniformly held that there is no such thing as private ownership either in water or the use of it, and that the appropriator being entitled to the use only of that for which he pays nothing, is in effect and in fact a recipient of the State's bounty to the extent of the value of whatever may accrue to him out of this free use, and that he is therefore no more entitled to dispose of the property of the State or its use at a profit to himself, than the mere user of any other kind of property, the use of which was granted for a specific purpose, is entitled to sell or dispose of the same or its use without the consent of the owner.

The first territorial law was enacted in 1875 and those sections having any bearing on the ownership of water or limita-

had a possessory right or title.

3rd. It limits the appropriation of this claim to the requirements of the soil.

It has appeared to the Board that neither by direction or inference is authority granted to the appropriator for any purpose whatever other than to use the water for the claim he owns, and this to the extent of the necessities of the soil only. The appropriation is authorized for the purpose of making his claim available for agricultural purposes and, in the judgment of the Board, it limits the use to that claim.

Section 4 appears, very clearly, to provide for the arbitrary dispossession, without compensation, of any part or proportion, falling short of the whole, of any claim to the use of water, and its transfer to others having an insufficient supply, by a commission, appointed under authority of law for this purpose. Such a provision has appeared to the Board as incompatible with any recognition of private ownership in the water secured by virtue of the appropriation.

The law of 1884 succeeded that of 1875 but did not repeal any of its provisions. It was therefore an addition to the water law already in force, the law of 1875 being in no way interfered with or affected by the new statute. It was in fact an amend-

Erratum.—Section 1 on opposite page should read as follows:

Section 1. All persons who claim, own, or hold a possessory right, or title, to any land or parcel of land, within the boundary of Wyoming Territory, when those claims are on the bank, margin, or neighborhood, of any stream of water, creek, or river, shall be entitled to the use of the water of said stream, creek, or river, for the purposes of irrigation, and making said claim available, to the full extent of the soil, for agricultural purposes.

missioners or the tribunal transacting county business as soon as such ditch or ditches shall be completed and prepared to furnish water.

Section 28 is quoted to show that the law was enacted for the purpose of requiring certain things of a company formed for the purpose of conveying water and that the law did not apply to any company organized for any other purpose.

In section 30, however, the word "unsold" appears, but not in connection with any preceding or following provision authorizing the sale of water. From the careful avoidance of any expression calculated to show that the sale of water was intended to be authorized, and on the contrary, the using of terms which merely authorized the conveying of water by companies organized for that purpose, it appeared to the Board that the sale of water or the recognition of private ownership in water was not intended. The fact that the law of 1875 was not repealed at this time appeared to greatly strengthen the contention that the Legislature of 1884 did not intend to enact a law inconsistent with any then in force relating to water. "Shall furnish water," "the rates at which it shall be furnished," and "shall be completed and prepared to furnish water," are the expressions used in the section, wherever the duties of the ditch company are set forth. When these expressions, together with Section 28, are considered in connection with the law of 1875, which as before stated did not even recognize the right to use the volume appropriated, if by so doing interference was had with the appropriations of others, the position of the Board appeared to be based upon a reasonable interpretation of the law.

The decree of the Board granting the use of water to the Springvale Ditch Company is as follows:

That Springvale Ditch Company by reason of the construction of the Springvale Ditch and the beneficial use of water for irrigation is entitled to sufficient water from Little Horse Creek to irrigate 700 acres of land. The same being in section 20; the N. W. ¼ section 21; N. ½ S. W. ¼; S. W. ¼ of S. W. ¼ section 21; E. ½ sec. 19; S. W. ¼ sec. 19; N. ½ of N. W. ¼ sec. 30; N. ½ of sec. 29; S. ½ S. ½ sec. 17; S. ½ of S. W. ¼ sec. 16; Twp. 18 N., R. 62 W., in an amount not to exceed one cubic foot per second of time for each seventy acres so irrigated. Said appropriation dates from February, 1884, and the right of said Springvale Ditch Company to the use of water from said

Little Horse Creek through said Springvale Ditch for the purpose aforesaid is prior and superior to any other right to the use of water from said creek, except as above stated.

It is therefore considered, ordered, adjudged and decreed by the Board that said Springvale Ditch Company do have the use of water from said Little Horse Creek for the irrigation of 700 acres of land; and for said purpose said Springvale Ditch Company to have water from said Little Horse Creek to the amount of ten (10) cubic feet of water per second of time, and that the right of said Springvale Ditch Company to the use of water to the amount and for the purpose aforesaid is prior to and superior to any other right to the use of water for beneficial purposes from said creek, except as above ordered and decreed.

A careful perusal of this decree shows: 1st. That the appropriation dates from February, 1884. 2nd. That the appropriation is made for the beneficial use of sufficient water, to the amount of ten cubic feet per second of time, to irrigate 700 acres of land, and the land is enumerated. 3rd. There is nothing in the decree authorizing the use of any more water than just the amount necessary for this irrigation, nor does it state what that amount is. 4th. The Springvale Ditch Company was not decreed the use of ten cubic feet per second of time, nor was it given the use of any other specific number of feet of water whatever, but it was decreed the use of water to irrigate 700 acres of land, "in an amount not to exceed one cubic foot of water per second of time for each seventy acres of land irrigated." In the view of the Board, there is a vast difference between granting the use of a flow of ten cubic feet per second of time outright and regardless of use, and granting a sufficient flow to irrigate 700 acres of land. The wording of the decree shows this conclusively. The Board did not undertake to designate the exact amount of water needed by the Springvale Ditch Company to irrigate its 700 acres of land. In fact it did not know; but the actual volume required seems to be clearly indicated in the deed of record transferring the full ten cubic feet per second to the Little Horse Creek Irrigation Company for its use during each alternate week throughout the irrigating season. A flow of ten cubic feet per second for each alternate week is exactly equivalent to a continuous flow of five cubic feet per second and if, as appears, the latter volume irrigated the lands of the Springvale Ditch Company, then the decree of the Board to that company was five cubic feet per second of time and no more.

Had the Board determined the extent of a water right wholly by the statutes in force at the time of the appropriation, the appropriator between 1875 and 1884 would only be entitled to such a volume of water as his individual diversion bore to the whole amount appropriated from the stream; while the appropriator after the latter date would be entitled to the full volume diverted by him and applied to a beneficial use and would be affected only by his priority. The consequent confusion and impossibility of administration which would have followed a decree based solely upon the laws in force at the time of appropriation led to the adoption of *the date of the appropriation, the volume of the appropriation, the purpose for which it was made and whether or not it had been continuous*, as important factors to be considered in the determination of a water right.

REPORT OF STREAM GAUGINGS AND INVESTIGATION OF THE WATER SUPPLY.

By A. J. PARSHALL, Assistant Engineer.

During the past two years the Assistant Engineer has given the greater part of his time during each irrigation season to the gauging of streams, looking after the observation stations and keeping records of their discharge.

Stations were maintained on the North Platte River at Orin, the Laramie River at Uva and Woods, on Clear Creek, Green River and Black's Fork during the year 1899.

At the close of that year the stations on Clear Creek, on Green River and on Laramie River at Uva were abandoned, they not being considered as important as formerly. The stations on the Laramie at Woods and on Black's Fork were continued, that at Orin transferred down the North Platte to Guernsey and new stations established at Peryam's on the Grand Encampment River and at Thermopolis on the Big Horn.

It has been thought wise to maintain at least two permanent gauging stations in the State upon streams which will best indicate the annual precipitation for a succession of years.

TABLE SHOWING MONTHLY AND SEASONAL FLOW IN ACRE FEET OF THE RIVERS ON WHICH GAUGING STATIONS WERE MAINTAINED FOR THE YEARS 1899 AND 1900.

STREAM	Year	April	May	June	July	August	September	TOTALS
Green River at Green River	1899	95,604	199,930	744,160	886,095	315,077	122,166	2,363,032
Laramie River at Uva	1899	57,994	71,676	160,954	94,276	12,425	3,279	400,604
Laramie River at Woods	1899	33,670	75,757	190,506	76,433	11,702	3,346	391,414
" " "	1900	7,439	119,121	105,296	6,801	3,075	2,629	244,359
Black's Fork at Granger	1899	53,321	140,708	278,343	111,771	24,671	10,944	620,258
" " "	1900	36,313	102,940	53,262	2,756	962	0	196,233
North Platte at Orin	1899	309,113	560,241	910,355	467,775	61,503	16,216	2,325,013
North Platte at Guernsey	1900			188,763*	93,213	27,106	5,029	314,116
Grand Encampment at Peryam's	1900		*46,865	104,435	9,365	5,188	3,812	169,665
Big Horn at Thermopolis	1900			588,354	288,354	167,666	* 44,609	1,088,957

* Fifteen days.

Thermopolis on the Big Horn and Guernsey on the North Platte seem to be the locations best calculated to give the desired results. At each of these points temporary stations have been established and records kept during the season just passed. The intention is now to make them more permanent in character and continue observations indefinitely.

Investigations will be made upon other streams as the work of this office progresses, and the information to be gained seems important. Some of the streams upon which these records have been kept for a number of years, and until the purposes for which they were intended have been accomplished, will be abandoned.

In this manner it is hoped that in time a fairly reliable record will be had of the more important streams, which will be of great value to irrigators and those in charge of irrigation matters.

The years 1899 and 1900 furnish results, the extremes in the run-off of our rivers; the former the greatest for many years, and the latter the least, neither of which can be taken as a fair average in determining the annual flow.

A table showing the monthly and seasonal flow has been prepared and appears on the preceding page.

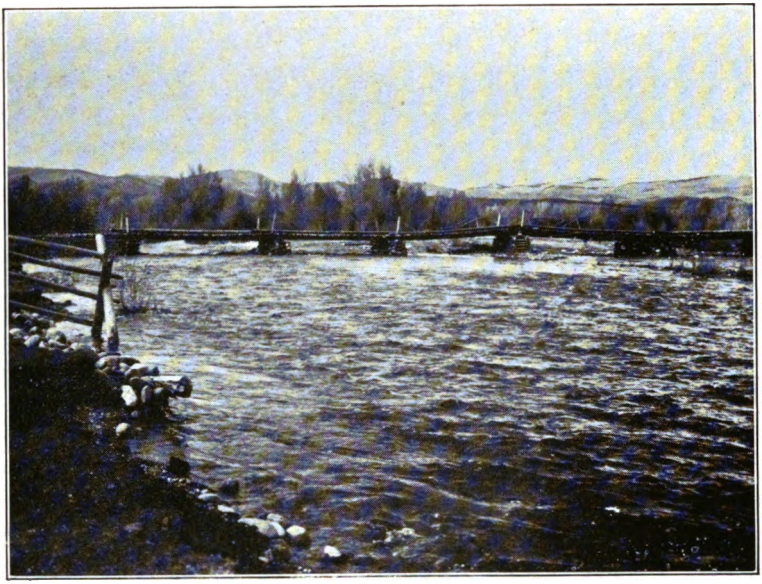
The U. S. Geological Survey has also rendered this office great assistance in extending its investigations, commenced some years ago, to determine the quantity and source of water supply of our principal streams, and such time as was not absolutely required in attending to our prescribed duties has been given to such work.

The Grand Encampment River was, until recently, almost unknown to the general public. Its waters were used unsparingly by the few settlers in its valley; but the development of so many great copper properties in the vicinity of its headwaters created a demand for new appropriations to an extent that made an investigation as to its actual flow a necessity.

Owl Creek had, for a number of years, suffered from a water famine as the season advanced.

The supply of the Grey Bull River was fully appropriated, and yet the reclamation of lands for which permits had been granted had by no means been completed.

It being a season of unusually low water, complaints were



GRAND ENCAMPMENT RIVER, HIGH WATER.

GRAND ENCAMPMENT RIVER, LOW WATER.

numerous from many sections of the State. It was decided to make reconnaissance surveys of as many streams as possible and it is proposed to continue these surveys as rapidly as funds may be available, and the time can be spared from other duties.

GRAND ENCAMPMENT RIVER.

The Grand Encampment is one of the largest tributaries of the North Platte River, and has its source in the Sierra Madre Range of mountains south of the boundary line between Wyoming and Colorado. It is, however, practically a Wyoming river, accumulating its waters largely from small streams and springs on the Wyoming slope of that water-shed, an area now being brought into public notice by the discovery and development of so many large bodies of copper ore.

After leaving the foot-hills near its junction with the North Fork, it flows through a fertile valley about two miles in width, around and across which numerous large ditches have been constructed and tracts aggregating nearly 8,000 acres irrigated. A large portion of this is now under cultivation, a greater part being irrigated for native grasses, which grow luxuriantly, though at an elevation of over 7,000 feet.

The many new applications for permits to use water for mining, power, townsite and irrigation purposes have made it important that a more thorough knowledge of the discharge of the river be of record.

On May 6th, 1900, a gauging station was established at a point near Peryam's ranch, the gauge rod having been attached to the east pier of Mr. Peryam's bridge, and from that date daily observations, morning and evening, were taken until October 1st. Five discharge measurements were made at different stages of its flow and a table showing daily gauge heights and the total discharge for that period submitted, the maximum and minimum discharges of the stream being—

On May 29th,.....4,685 second feet.
On September 2nd and 3rd, 10 second feet.

The minimum discharge at the station does not, however, represent the full amount carried at low water. On July 19th, 1900, assisted by W. T. Peryam, Jr., I measured the water

flowing in the main channel of the Grand Encampment River above points of diversion, in the North Fork of the river, (which discharges into the main channel above station), and in the several ditches which take their supply from these streams above the station, with the following results:

North Fork above diversion		24.3 Sec. Ft.
Nichols Ditch near headgate	4.9 Sec. Ft.	
Wolford Ditch near headgate	5.2 Sec. Ft.	
Townsite Ditch near headgate	2.4 Sec. Ft.	12.5 Sec. Ft.
Discharge into Grand Encampment River		11.8 Sec. Ft.
Grand Encampment River above diversion		117.3 Sec. Ft.
Whambaker Ditch near headgate	1.9 Sec. Ft.	
Parr Ditch near headgate	5.1 Sec. Ft.	
Wagoner Ditch near headgate	49.0 Sec. Ft.	
Mill Race Ditch near headgate	30.5 Sec. Ft.	
Peryam-Nichols Ditch near headgate	2.1 Sec. Ft.	
Grand Encampment River at station	33.8 Sec. Ft.	
Not accounted for	1.7 Sec. Ft.	
Total		129.1 Sec. Ft. 129.1 Sec. Ft.

A supply, notwithstanding that it has been a season of unusually small precipitation, quite sufficient for present requirements.

A RECONNAISSANCE OF OWL CREEK.

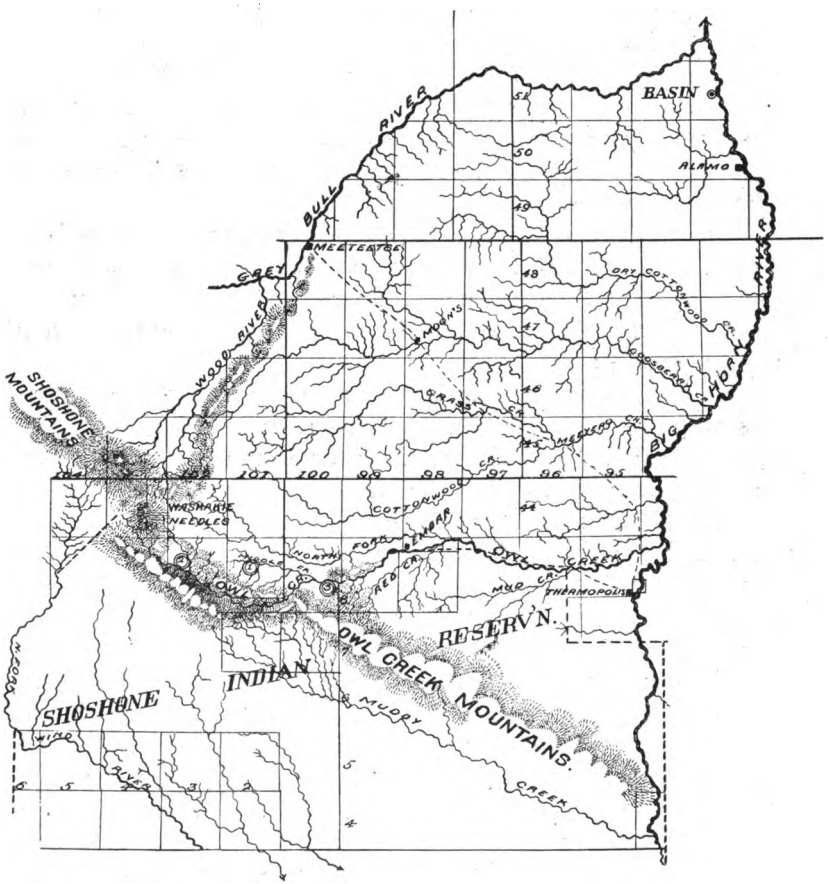
A low range of hills extending from the Washakie Needles, a prominent landmark at the intersection of the Owl Creek and Shoshone Mountain ranges, to a point on the Big Horn River between Basin and Alamo, forms a divide or water-shed, diverting the drainage on the south and east in a southeasterly course to the Big Horn River. Dry Cottonwood, Gooseberry, Meeyero and Owl creeks, with their numerous tributaries, are all important streams during the early months of each year, but supply little or no water for other than stock or domestic purposes later than July 15th. All of these creeks flow through valleys that would add largely to the agricultural area of the State, could the flood waters of the spring months be conserved for use at times when most needed, and all, with the possible exception of

BRANDING CATTLE AT EMBAR RANCH.

HEREFORD COW AND CALF, EMBAR RANCH.

Owl Creek, seem to possess natural storage basins where water, sufficient for irrigating large tracts, could be stored at a reasonable cost.

Owl Creek, which marks the northern boundary line of the



OWL CREEK BASIN.

Shoshone Indian Reservation, is the largest and most important of these streams, having its source in the cañons and ravines about Washakie Needles, and running in an easterly direction, passing through the cañons of the Owl Creek Mountains, then

through a valley of from one to five and even ten miles in width for a distance of nearly thirty miles until it empties into the Big Horn River.

The principal tributaries of Owl Creek are, on the north, the North Fork, a considerable stream, discharging from 1,000 to 2,000 second feet during flood season, after which a few hundred feet, gradually diminishing in quantity until after July 1st, when there is little or no moving water, and the Middle Fork, which is a flood-water stream, carrying no water after the spring freshets except the run-off after storms, but furnishing a large number of springs which serve as watering places for stock the whole year round.

On the south, Red Creek is a perpetual stream; so is Mud Creek, both draining the north slope of the Owl Creek Mountains, neither carrying large bodies of water during the spring freshets, but both furnishing a few feet of spring water during the dryest seasons.

Owl Creek was, perhaps, the first stream in the Big Horn Basin upon which permanent settlement was made, the Embar Cattle Company establishing their home ranch at what is now Embar, more than twenty years ago.

The soil of the bottom lands is rich and productive, the climate mild and the elevation ranging from 4,500 to 7,000 feet above sea-level. Varieties of vegetables and fruits are grown successfully which are not attempted elsewhere in the State, outside of the Big Horn Basin.

A number of well cultivated ranches are to be seen, producing largely hay and grain, stock-raising being the chief industry. Alfalfa thrives. At the Basin ranch of the Embar Company I found a field containing 500 acres, upon which two crops of alfalfa were harvested each year, and at several ranches fields of 100 acres and upwards in extent.

The water supply of the creek is almost entirely employed in irrigating cultivated lands, it being of too great value to be used on native grasses.

In the year 1899, the irrigating ditches upon Owl Creek and tributaries were surveyed, showing there had been constructed fifty-five miles of ditches, under which proof was made that 4,600 acres of land had been reclaimed and converted into farms. As much more land was found for which permits had been is-

sued and where preparations were being made to reclaim under flood-water permits, which will enable settlers to use water until about July 1st, or until after their first crop of hay has been secured.

The natural productiveness of the soil, the fact that the water supply is now practically exhausted, and that there still remain from 20,000 to 30,000 acres of unoccupied lands which could be irrigated at little cost if water could be had, has led to the preliminary steps being taken in the way of investigating the water supply.

In August, 1899, and again in October, 1900, I made trips up Owl Creek and the Middle Fork for the purpose of ascertaining if it would be possible to impound the flood waters of these creeks to advantage and at a reasonable outlay. The reconnaissance extended from Embar, above which the valleys are narrow, to near the head of the streams where the mountains break into foot-hills.

In township 43 North, Range 101 West, Middle Fork passes through a narrow gorge between two ranges of hills, where a survey might prove the possibility of constructing a reservoir at a cost which would not be too great.

In Township 43, Range 102, where Owl Creek leaves the mountains, in the foot-hills, is a natural basin several square miles in extent, through which the creek runs, and where it is reinforced by the waters of several smaller streams draining the springs of the surrounding mountains; and while but little water, perhaps four or five second feet, was found in the channel twenty miles below, here the discharge was between thirty and forty second feet.

In leaving the basin the creek enters a cañon at the mouth of which it is from 150 to 200 feet wide; the walls are of solid rock rising perpendicularly sixty feet, at which point there is a small platform. From this height the rocky sides of the hills rise at an angle of about thirty degrees. At the mouth of the cañon the basin widens out in circular form, and at the sixty-foot elevation a level taken indicated that a dam of this height would back water for one-half a mile, and by raising the dam greater surface would be covered proportionately. How great the cost would be can be determined only by careful survey.

Rock work would not be expensive as an amount for any ordinary use is close at hand.

The distance through the cañon from this point to where the creek again enters the valley is in a direct line twelve or thirteen miles, but very much greater if the channel be followed. The walls are precipitous, in many places almost perpendicular, rising to a height of from 1,500 to 2,000 feet, and except at intervals when the sides are cut by ravines and gulches, the bed of the stream cannot be reached except by most dangerous climbing.

In October, 1900, I made an attempt to pass through the cañon. I gained the bed of the creek by descending a dry gulch about two miles below the upper basin, the gulch dropping probably 1,500 feet in less than a mile. I found that the channel carried, as I estimated its discharge, about thirty second feet of water, over a bed moderately free from boulders and which had been worn in time through an almost solid sandstone formation. Now and then there were rapids and falls where the water would drop five, ten and even twenty feet, and occasionally masses of rock fallen from above block or cover the stream to great heights. I found it impossible to proceed further than two or three miles along the channel and after a difficult climb reached the top of the walls, which I followed to a point a few miles above the mouth of Middle Fork, but was unable to discover any opening or basin where a reservoir would be feasible. About two miles below the mouth of Middle Fork, Owl Creek again enters a gorge between two rocky points of a mountain spur, which seems a practicable site for a reservoir if it should be found, after a survey, that the expense would be justified.

OTHER SOURCES OF WATER SUPPLY.

There are two other plans for obtaining a water supply to be considered. First, that of carrying by ditch from the creek to some large natural basin, which seems feasible to one in passing over the country, and second, the turning of North Fork of Wind River into Owl Creek. Whether the latter is feasible or can be done at any cost I am unable to say. But I believe the cost of a survey, as well as a survey of the several reservoir sites above mentioned, would be money well expended.

DAM SITE, UPPER GREY BULL RIVER.

ANOTHER VIEW OF DAMSITE, GREY BULL RIVER.

GREY BULL RIVER.

The Grey Bull River, next to the Shoshone, is the largest tributary of the Big Horn and has its source near the summit of the main range of the Rocky Mountains, within a few miles of the headwaters of the Yellowstone, Snake and Wind rivers. With its numerous tributaries, of which Wood River is the most important, it drains an area of over 1,000 square miles, including a region containing the highest mountain ranges within the State, upon whose summits and heavily timbered slopes the melting snow, which never entirely disappears, furnishes a perpetual supply of running water of considerable volume.

The fall of the river, through the mountains, is very great, in many places exceeding one hundred feet to the mile, until near its junction with Piney Creek, where it leaves the cañon, and from this point the descent will average about fifty feet to the mile for the next fifty miles.

At the mouth of Piney Creek is the first settlement on Grey Bull. Here the valley is perhaps one-half a mile wide and broadens out gradually until Fenton is passed, where the water is carried in irrigation ditches on either side over a valley twenty miles in width.

On no large stream in Wyoming have the waters been more thoroughly utilized or the irrigated area so largely cultivated as here. The banks of the river are not high, and its rapid fall has enabled the irrigator to turn water upon the land at little cost. A recent survey shows 360 miles of ditches and canals constructed and in use—with many more in course of construction—furnishing water for 35,000 acres of land, a greater part of which is cultivated.

The water supply of the ordinary season is fully appropriated, and the problem is no longer to find settlers for vacant, irrigable lands, but to provide water for those who have settled upon the land without an adequate supply, as well as an amount to irrigate as much as may be of the many thousand acres contiguous—the best in the State— for which there is no supply.

The Grey Bull, during the spring and early summer months, discharges a great volume of surplus water, and it is believed that a careful survey will demonstrate that several feasible res-

ervoir sites, of considerable capacity, are to be found at its headwaters, as also on Wood River and Rawhide and Meeteetse creeks.

In November, 1899, through the courtesy of Col. W. D. Pickett and Mr. Nathan Rush, who have been residents for many years on the upper Grey Bull, and who have become thoroughly acquainted with all that mountainous country east of the Yellowstone National Park in which the river and its many tributaries have their source, I was enabled to make a hurried trip through the lower cañons to a basin which they had informed me possessed many natural advantages for impounding water at a moderate cost. The lateness of the season precluded the possibility of my making a survey at that time, but a few observations with a level showed that the stream had less fall than I had found at any point below for more than fifty miles. The width of the valley I estimated to be from one-quarter to one-half mile, the greater part of it smooth and level, as was proven by the fact that the river had no well defined channel but changed its bed, plowing its way from one side of the valley to the other during high water, and from year to year. The lower end of the basin was reasonably narrow, the quantity and quality of material required for use in the construction of a dam were abundant and near at hand. The expense of a survey seemed warranted.

In the latter part of September, 1900, I outfitted at Fourbear, where I procured the services of a rodman, packer and pack-train. A fall of about twelve inches of snow during the night before we were to start prevented our taking the trail through the cañon, by which route the distance is only about fifteen miles. The character of the trail is such as would make it an unnecessarily hazardous undertaking when covered with snow. Our course was in a southwesterly, then northwesterly direction, over two mountain ranges, a circuitous journey of twenty-five miles to the basin, which is located on that strip of unsurveyed lands between the 13th guide meridian and the east line of the Yellowstone Park Timber Reservation in a direct line, a little south of west, ten miles distant from Fourbear (as it is shown on the map of Wyoming published by the Interior Department.)

Owing to the depth of the snow at the higher points (it had

now disappeared in the valleys) and the great distance to any known Government corner, no attempt was made to ascertain our exact geographical location.

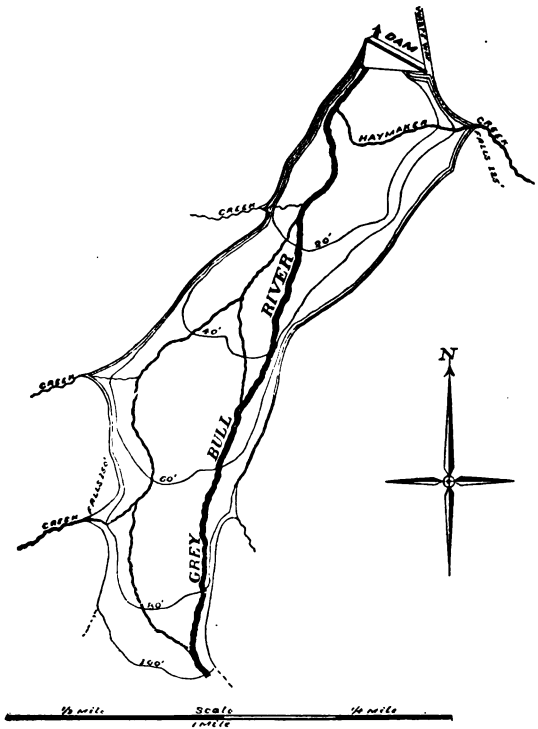
At the lower extremity of the basin, where it narrows down to enter the cañon, is an immense deposit of perhaps forty acres in extent, of broken, ragged porphyritic rocks, varying in size from those of a few pounds in weight to those weighing a hundred tons or more. They extend from the river channel, where they are piled up from thirty to fifty feet high, back to the cliffs on the east, where the height of this peculiar deposit is not less than two hundred feet. The southern line is a veritable stone wall, very steep in places and forming an angle of about eighty degrees with the stream and western walls. Along the southern line of this moraine is the site chosen for the dam. A natural wasteway (see plate) which only required the removal of a limited amount of rock to give it capacity to carry off surplus flood waters, at an elevation of ninety-eight feet above the present water line, determined the height to which, in my judgment, the dam could be most economically built. From this height as an initial point and high water line the survey was made.

The ease with which rock could be handled by means of a derrick, or by a chute from the greater heights, as well as the vast quantity of that material so well calculated for that purpose, persuaded me to recommend its use as largely as possible, if work should be undertaken.

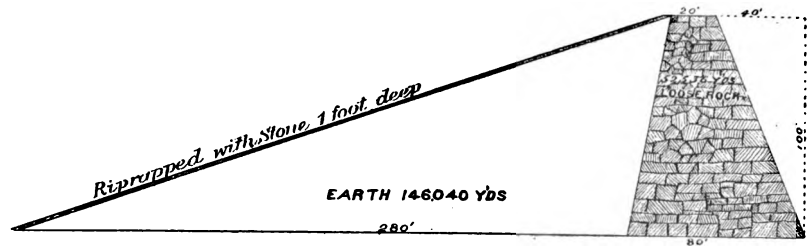
Earth, to be used in reinforcing and adding to the stability of the structure, is not wanting. The tract of land north of Haymaker Creek (see map) and between it and the moraine is comparatively free from boulders and can be handled to advantage at very low cost. The material which will have to be brought in from the outside is cement, for use in the masonry work of the sluiceway, and iron sluice-gates and tower, the total cost of which need not exceed one thousand dollars.

ESTIMATES.

Superficial Area .....256 Acres.
Capacity.....14,024 Acre Feet.



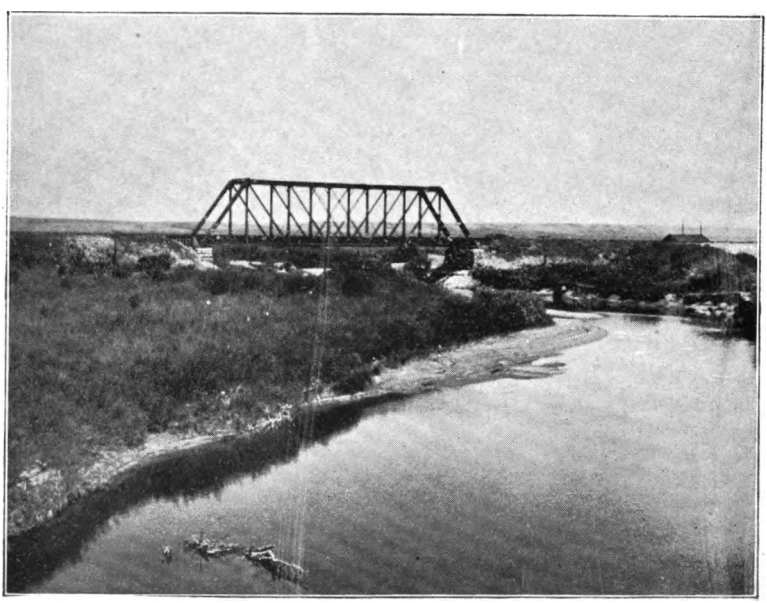
CROSS SECTION OF DAM SITE



CROSS SECTION OF DAM

MAP OF RESERVOIR SITE AND PLAN OF DAM ON THE UPPER GREY BULL RIVER.

BLACK'S FORK CANAL AT TOWN'S RANCH.



HAM'S FORK, ONE MILE ABOVE MOUTH.

COST OF CONSTRUCTION.

145,040 cubic yards earth at 15 cts.	$21,906
52,536 cubic yards rock at 40 cts.	21,014
715 cubic yards masonry at $7	5,005
4,149 square yards rip-rapping at 25 cts.	1,037
Two three-foot sluice-gates at $250	500
Iron for tower	500
Total	$49,962

BLACK'S FORK DISTRICT.

Black's Fork and its numerous tributaries drain the extreme southwestern portion of Wyoming into Green River. Ham's Fork and the two Muddys on the north rise in the Sublette Range and the Bear River Divide respectively; while Black's Fork proper, and Smith's Fork, its only important tributary on the south, have their source in the Uintah Mountains, south of the southern line of Wyoming, in Utah.

Below the point where Ham's Fork joins Black's Fork, but little has been done in the way of irrigation. This is also true of Black's Fork as far up as its junction with Smith's Fork, so that in adjudicating these streams Black's and Smith's Forks are considered a system separate from the others.

In this valley are found the oldest ditches in the State, some of which are still in use, though nearly ruined by the thick growth of willows which have overgrown their banks and the land adjoining. In 1854, the Mormons established a supply station some miles above Fort Bridger, where a flour mill was erected, and where farming was evidently carried on, on a small scale. Several hundred families have settled in the valleys, and ditches are taken out of all the streams far up into the foothills, irrigating a great number of small tracts on either side in the narrow valleys, covering in all perhaps 15,000 acres.

Further down several large canals carry water upon the higher lands; the largest of which is the Black's Fork Canal, which has a capacity of nearly 100 second feet, and which carries water upon the low plateau between Black's and Smith's Fork, in Townships 15 and 16 North, Ranges 114 and 115 West.

For a number of years complaints have been frequent of

the over-appropriation of the water supply, notwithstanding none but flood-water permits have been granted by the State Engineer for new appropriations. The conditions, as they really existed, were difficult to discover.

On July 26th, 1900, I visited and made measurements near the headwaters of Black's Fork above the point where ditches were in use. Here the stream was running in three distinct channels, discharging respectively 62.8, 1.3 and 7 cubic feet per second, or 71.1 second feet in all.

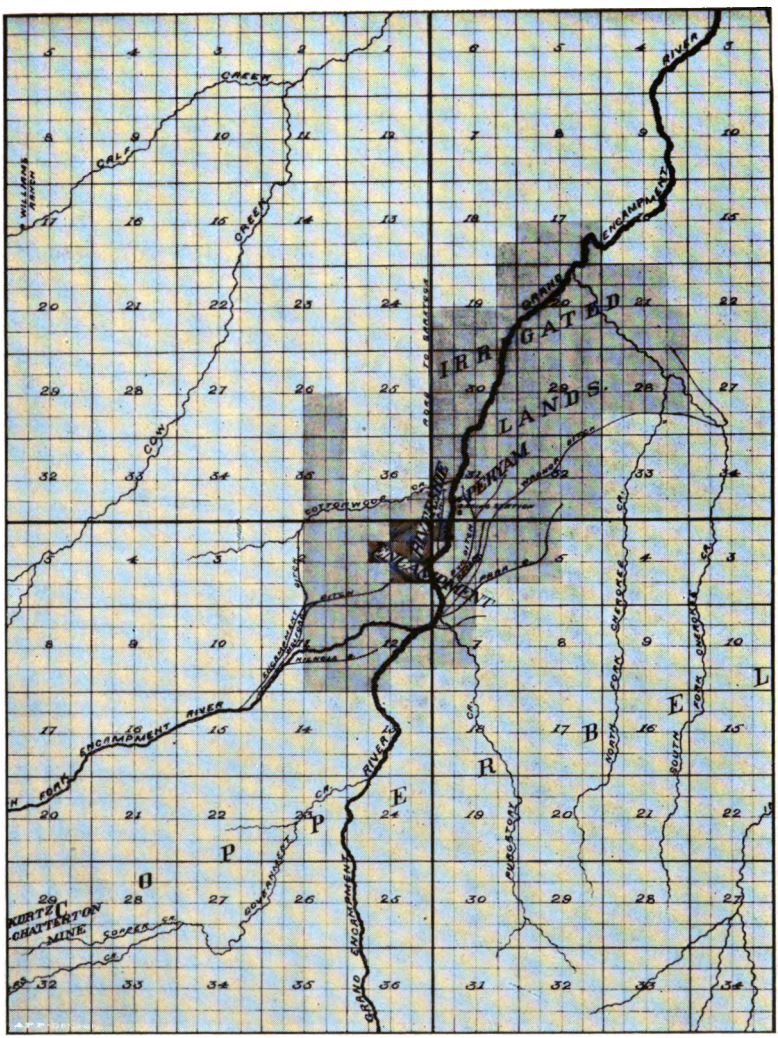
On the following day I measured Smith's Fork above points of diversion, where I found five distinct channels carrying respectively 4.1, 9.14, 1.5, 2.93 and 5.4 second feet, a total of 19.38 second feet. The same day at Mountainview on Smith's Fork 3 second feet was found in the channel, while a few miles below all water had been taken from the stream by small ditches.

At old Fort Bridger Black's Fork was also dry. A measurement was made of the volume running in the Black's Fork Canal at a point south of Fort Bridger and the discharge was 41.9 second feet. Other ditches carrying considerable water were passed but not measured. It was estimated, however, that no great amount was lost by sinking and it was evident that only a very small fraction of the water diverted from the stream found its way back into the original channel at any point above Fort Bridger; yet on July 28th, the day following, I measured the discharge of Ham's Fork at Granger (all other tributaries were dry) and found 20.66 second feet. A few hours later Black's Fork below Granger measured 26.8 feet, showing that at points below Fort Bridger 6.2 second feet had been taken up in some manner.

The importance of impounding a portion of the flood waters for use later in the season has long been recognized by the State authorities and during last August the officials of the U. S. Geological Survey sent a representative to visit the section of country adjacent to the headwaters of Black's and Smith's Forks for the purpose of making a reconnaissance of that region. What information was obtained has not been given to the public.

MODIFICATION OF GENERAL LAND OFFICE REQUIREMENTS.

In making proof of reclamation under the Desert Land Act entrymen were formerly required to furnish evidence of the pos-



GRAND ENCAMPMENT VALLEY.

session of a permanent water right from the State, and the only evidence acceptable was a final certificate from the Board of Control.

On streams not yet adjudicated, the inability of the entrymen to comply with this requirement flooded this office with requests for relief, or, in lieu thereof, for such information as would, when presented to the General Land Office, afford the relief to which settlers were entitled. With the view of obtaining some change in the nature of the requirements or such modification as the situation would seem to demand, the following letter was directed to the Hon. Commissioner at Washington:

Cheyenne, Wyoming, August 14th, 1899.

Hon. Commissioner of the General Land Office,
Washington, D. C.

Sir—This office is in receipt of numerous requests, from appropriators of water who desire to prove up on desert lands, for the final certificates to which they are entitled after completing their appropriations according to law.

These requests are accompanied by a notice to the applicant from the register of some local land office, stating in effect that unless this final certificate of appropriation is furnished within the following sixty days, the entryman's claim will be held for cancellation. In these cases, the entryman has a duly recorded permit, under the laws of the State, to appropriate water, and if sufficient time has elapsed since that permit was issued, the strong presumption substantiated by his testimony before the register and receiver, is that he has complied with the law and is entitled to a final certificate of appropriation. Before this can be issued, however, he is required to make proof of appropriation before the properly constituted State authorities, over whose actions he has no control whatever. Under these conditions, the cancellation or holding for cancellation of the entry of a settler who has complied with the laws of the United States governing the entry and reclamation of desert lands, and, in addition thereto, has complied with the State laws controlling the appropriation and use of water, would appear to be working unnecessary hardship and to be a condition calling for some modification of departmental orders, or in lieu thereof, for such extension of time to the settler in which to furnish his final certificate as may be deemed proper and sufficient. Many of these settlers are greatly alarmed lest, notwithstanding their full compliance with both National and State laws, they are yet to lose their homes, and it is hoped that such action may be taken by your office regarding these final certificates as will not only reas-

sure many whose all is in apparent jeopardy, but will, in addition to this, secure them against loss on account of unavoidable delay in official action over which they have no control.

I have the honor to be,

Yours very respectfully,

FRED BOND,

State Engineer.

The relief asked for was embodied in instructions to registers and receivers in this State, as appears by the following instructions:

DEPARTMENT OF THE INTERIOR.

GENERAL LAND OFFICE.

Washington, D. C., August 29th, 1899.

Registers and Receivers in the State of Wyoming.

Gentlemen:—The regulations of this office require that—"persons making desert land entries must acquire a clear right to the use of sufficient water for the purpose of irrigating the whole of the land, and keeping it permanently irrigated."

Under the Constitution of Wyoming, sanctioned by Congress, the right to control and dispose of the waters of the State is reserved to the State, and under the Act of December 22nd, 1890, (Laws of Wyoming, 1890-'91, page 100), any person may divert waters for irrigation after having his application therefor approved by the State Engineer. Section 36 of that Act provides that when the proof of appropriation under such application has been furnished, the State Board of Control shall issue a certificate of appropriation thereon.

Heretofore, it has been the practice of this office to require a copy of this certificate to accompany each final proof as evidence of the legal appropriationn of the water used in reclamation, but it now appears that on account of the large amount of business pending before the State Engineer and the Board of Control it is impossible for them to furnish these certificates as fast as final proofs become due under the desert land law. This fact makes it necessary to alter the practice of requiring these certificates and compels the acceptance of other evidences of appropriation. Since the right of appropriation is given by law and may be exercised as soon as the application has been approved, it does not depend upon the issuance of the certificate. This certificate was not intended as a grant of a right, but was evidently devised as a convenient evidence or an easy method of proving a right which had already vested, and hence when it

is impossible to furnish this certificate, the right of appropriation may be shown by other sufficient evidence.

You are therefore instructed to notify all entrymen who have been or shall be unable to furnish these certificates that their proof, if otherwise satisfactory, will be accepted upon the filing of a certified copy of their approved application, together with proof that they have completed the appropriation in the manner required by the State laws and regulations and properly reported that fact to the State Engineer, and this evidence will be taken as sufficiently establishing their clear right to the use of the water.

Very respectfully,
W. A. RICHARDS,
Acting Commissioner.

Under this ruling, the owner of a desert land entry, in making final proof of reclamation, is required to furnish the local land office with a statement from the State Engineer to the effect that the Engineer's office has received notice of the completion of the ditch and appropriation of water according to the terms and requirements of his permit, and that the same has been made a matter of record in his office.

A certified copy of the permit is also accepted as evidence of the possession of a permanent water right, providing it has endorsed thereon, by the State Engineer, the statement that the ditch has been completed and the appropriation of water made in accordance with the terms of the permit.

SELECTION OF STATE LANDS.

At the October meeting in 1899 and the March meeting of 1900, the Board of Control, sitting as a special land commission, selected 100,000 acres of land for the State.

These lands were selected in lieu of sections 16 and 36 in the Teton, Big Horn and Black Hills Forest Reserves, and no more than one section could be taken for one person.

Applications for over a half million acres were on file in the office of the Commission and, before beginning the selection of these lands, it was determined that as many as possible of the meritorious and deserving applications should be granted, up to the limit of the land available. Large numbers of the applicants desired only 160 acres each and, in nearly every one of

these cases, an investigation showed that this selection was necessary and essential to the applicant's continued safety and profit in his ranch or farm business. Many were contented with eighty acres, some even with forty, and while many others asked for more land than could be selected for them without ignoring others who appeared equally entitled to consideration, the former were given a portion of what they desired, and the selection made in such a way as would afford the greatest amount of protection to the home and homestead.

Of the 100,000 acres selected, each Superintendent, on order of the Commission, was allowed one-fourth, or 25,000 acres for his Division. The results of these selections differ both as to the number of applications granted and the acreage selected for each, and are set forth in the following table:

DIVISION NO.	NO. SELECTIONS	AVERAGE ACRES EACH
1	91	275
2	94	266
3	65	385
4	51	490

The total number of selections made is 301, and the average for the whole State is 333 acres, a figure which demonstrates the intent and purpose of the Commission to distribute these lands among as many citizens as possible. Selections made in this way have another value not lost sight of by the Commission. The lands of the State are leased to numerous small holders, thus vastly increasing the possibilities of a perpetual and unbroken income therefrom accompanied with a reduction of taxation and an increase of school funds.

For the guidance of the Superintendents, in making other possible selections in the near future, the Commission at its meeting in October, 1900, unanimously adopted the following resolution:

Resolved by the Public Land Commission, that inasmuch as there are on file in this office applications for the selection of State lands, aggregating in acreage an amount vastly in excess of the lands available for selection, it is the sense of this Commission that every selection should be confined to as small a tract as possible, and that no selection for any one person shall exceed 320 acres, and the Superintendents are instructed accordingly.

The above resolution, embodying as it does the individual

views of the members, was spread upon the records as an order of the Commission. It does not necessarily indicate that no more large tracts will be selected, but that large tracts will not be selected while the State has such limited areas to choose from, and so many applicants for them. The change in policy has been brought about by changed conditions. From the days when the Commission was obliged to go begging for lessees of State lands, when its offerings were in any amount up to 20,000 acres to one individual with only partial success, followed in some cases by repudiation, to the time when a resolution of the nature of the above is found necessary for the protection of both State and citizen, there has been a gradual but sure change of public sentiment in favor of State control of grazing lands. The opposition to the general proposition to lease the grazing lands comes from a part, but not all, of those who now graze the public lands free of cost. A large number of these can still see only injury to their interests in any proposition requiring pay, however small, for what is now obtained without expense. The business, however, is attractive because profitable, and the number of those engaging in it is being rapidly augmented, so rapidly, in fact, that the mind of a seer is not needed to foretell the day when those engaged in it will begin to interfere with each others' range. Indeed, this condition already exists in some parts of the State and whether, as it becomes more critical, it will force to the wall the weaker and least able to protect themselves, leaving the public domain to the enjoyment of the few and strong, depends entirely upon the prior discovery and adoption of some other solution of the problem. The large majority of those favoring leasing are, and always have been, found among the small ranchmen and farmers who have homes to protect and defend. The privilege of a certain amount of grazing land, adjacent to or near their irrigated holdings, is necessary to their continued well-being, and they have long since discovered that there is only one way by which it can be secured to them, and that is by paying for it.

Between these two conflicting interests, and as a direct result of their differences, National Irrigation Congresses and National Irrigation Associations are now ignoring the public grazing land question, and, for the time being, are devoting their time and energies to the solution of other problems. The

determination of these other questions will not, however, solve this one, and long before the reservoirs are all built, "what to do with the grazing lands" will have become too acute a question for its solution to be longer delayed. What this solution will be may not now be foretold, but we may be certain that any outcome which involves the absorption and enjoyment of the public range by the few, thus preventing growth of population, will never be acceptable to the Wyoming people. This being set aside as one of the possibilities, it is difficult to conceive of any permanent division of the public lands which does not involve a legal control. Especially is this true among a class constantly changing, always increasing in numbers, and with interests which, through their growth, encourage encroachments on each other.

It would rather appear that the time is not far distant when these interests, which are now arrayed against land leasing, will, for their own protection and self-preservtion, be the strongest supporters of the movement.

WATER RIGHT DECISION BY THE SUPREME COURT.

This decision, rendered in May, 1900, settles a number of questions relating to the legal status and authority of the Board of Control and is, from a public standpoint, perhaps the most important ever handed down by that body.

The suit was instituted in the District Court of Johnson County for the purpose of determining whether or not the plaintiff had a right to use water from French Creek, although he did not submit proof in adjudication proceedings before the Board of Control, notwithstanding the fact that he had full notice of those proceedings. The questions reserved to the Supreme Court which were answered in the decision were in substance as follows:

1. Is the Board of Control constitutionally invested with judicial powers to adjudicate water rights under the statute?

2. Is the statute, itself, which confers this power, constitutional?

3. Is an appropriator, whose rights were acquired prior to the adoption of the Constitution, required to submit his claims to the Board for determination?

4. If he does not do so, is he therefore estopped by the findings of theBoard?

5, Does the service of notice upon claimants by mail constitute due process of law?

These questions were all answered affirmatively by the Court, with the exception of the fourth, where it was held that since the statute does not impose any penalty for failure to submit proof, nor any limitations upon a claimant from thereafter ascertaining his rights in the courts, he is not estopped from doing so where his rights had not been considered by the Board. The claimants are all required to submit their claims for adjudication and, in the absence of fraud, the decree of the Board will be conclusive both as to the general public and the parties participating in the proceedings.

While the Court held that a decree of the Board of Control is not necessarily a determination of all rights to the waters of the stream adjudicated therein, and gave a claimant liberty to ascertain and maintain his rights in the courts, in cases where his claims had not been determined by the Board, it also recognizes the value of a single proceeding to determine and settle water rights, in the following language:

It is probably true that public and private interests will be more securely preserved by a determination in a single proceeding of the right and priorities of every existing claimant, and a law so framed to effectuate that object and render the decree conclusive of every accrued claim would doubtless subserve a useful and salutary purpose.

As forming a part of the dictum in this case and necessary for a clear understanding of the decision, the views of the Court were clearly set forth on some points heretofore determined. The definition of the word "appropriation" is one of these, and the meaning of the word, as defined by the Supreme Court in the case of Moyer vs. Preston, in 1896, is reaffirmed, but the definition is made more succinct and forcible. In the latter case (6 Wyo. 321) the Court said "To constitute an appropriation, there must exist not only an intent to take the water, but that intent must be accompanied or followed by some open physical demonstration, and there must ultimately be an application to some beneficial use. The initial act must also be followed up with reasonable diligence, and the purpose consummated without unnecessary delay in order that, by the doctrine

of relation, the time of the appropriation may relate back to such initial proceeding." In the decision under comment, the language of the Court is not only terse and emphatic, but it is impossible of misconstruction. The Court says, "The appropriation consists in a diversion of the water by some adequate means and its application to a beneficial use." And again, "The title of an appropriator fastens not upon the water while flowing along its natural channel, but to the use of a limited amount thereof for beneficial purposes, in pursuance of an appropriation lawfully made and continued."

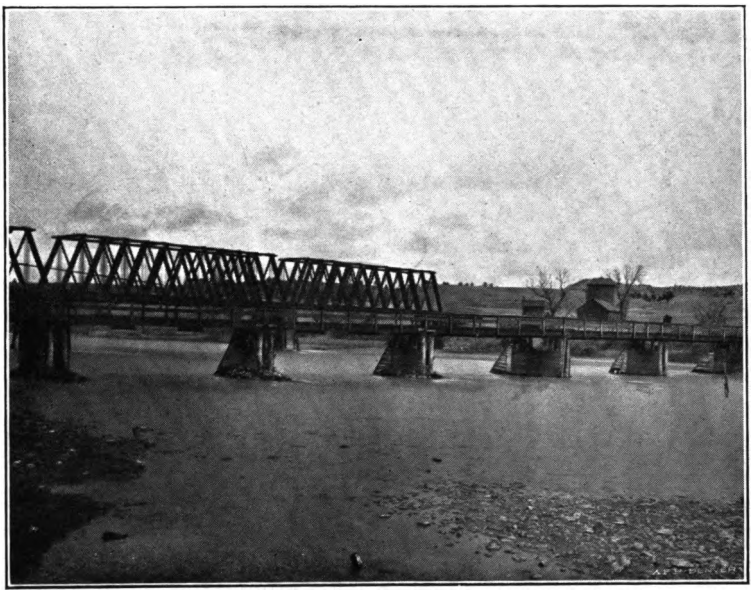
It was further decided that a right to water does not constitute any ownership in the water itself, but only in the right to use the amount appropriated, and that the ownership of the water itself is in the State.

The passing upon the question as to whether the ownership and control of the waters of the State are or should be in the State itself, which has long been a theme for contention between those advocating public and those advocating private ownership, and its settlement to the best interests of all, is a subject for especial congratulation. The problem can now be relegated to those surrounding States which are still struggling to reach the high plane occupied by the Wyoming standard.

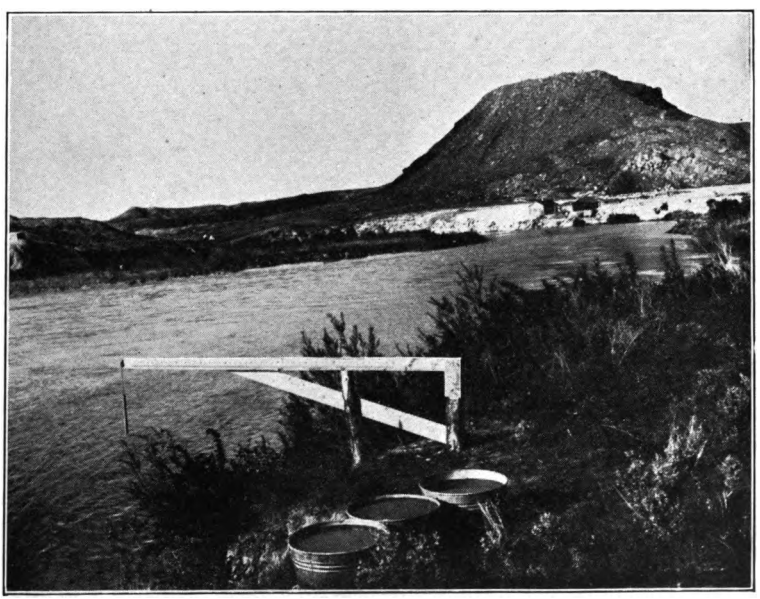
WORK OF THE BOARD OF CONTROL.

The determination of water rights, where the appropriation was made under permit from the Engineer's office, has been evenly distributed among the four water divisions. The determination of rights and priorities under territorial appropriations has been confined to Division No. 3, and comprises the adjudications of Owl Creek and tributaries, the diversions being entirely from the north bank of the stream and from tributaries flowing into it from that side, and Grey Bull River and tributaries complete.

On Owl Creek, the proofs of appropriation were taken by the Superintendent of Division No. 3, at Thermopolis, in 1899, and submitted to the Board in March, 1900. At this meeting the rights and priorities of twenty-seven appropriators, diverting water through twenty-six ditches, were determined and certificates therefor issued. The volume of water appropriated



GAUGING STATION ON NORTH PLATTE RIVER AT GUERNSEY.



GAUGING STATION ON BIG HORN RIVER AT THERMOPOLIS.

was 65.71 cubic feet per second, for the irrigation of 4,600 acres of land.

The proofs of appropriation from the Grey Bull and tributaries was taken by the Superintendent in May, 1900, and submitted to the Board at its October meeting. The rights and priorities of two hundred and thirty-six appropriators, diverting water through one hundred and twenty-nine ditches and canals were determined. The volume of water appropriated is 499.9 cubic feet per second and the land reclaimed is 34,993 acres.

The proofs of appropriation of water from Laramie River and tributaries were taken by the Superintendent of Division No. 1, at Laramie and Wheatland, in May, 1900, but these have not yet been submitted to the Board for its action. An examination of the proofs submitted shows that claim is made to a total appropriation of 2,638.4 cubic feet per second, and that 184,688 acres of land have been irrigated and reclaimed. The large discrepancy between the gauged flow of this stream, extending through a term of years, and covering those in which proof of irrigation has been submitted, and the volume applied to the land as set forth in the proofs, is a matter for the thoughtful consideration of the Board when these proofs shall come before it for action.

The gauging station for the determination of the volume of water available for irrigation from this stream is located at Wood's Landing, above all ditches diverting water from the river.

An examination of the recorded daily flow for the months of June, July and August of each year for the past five years. is of much interest at this time and shows the following; the figures are in cubic feet per second:

YEAR	JUNE	JULY	AUGUST
1896	465	127	94
1897	1,524	316	113
1898	932	99	—
1899	3,207	1,255	191
1900	1,773	111	50

During the fourteen months whose record is here given, there was only one, viz., the month of June, 1899, when the flow exceeded the amount claimed to be appropriated. The average flow in the month of June, for the five years, is 1,584 second feet, or only sixty per cent. of the volume claimed, while the

average flow for the month of July is 382 second feet, or fourteen per cent. of the flow claimed.

In his report for 1894, the State Engineer gives the average discharge of Laramie River during the irrigating seasons of 1889, 1890 and 1891 and from these, taken in connection with the character of the soil along that stream, draws the following conclusion:

"It is not believed, therefore, that the discharge of the Laramie River, at the point gauged, will suffice for the irrigation of more than 100,000 acres, but the measured volume is reinforced below by two important tributaries, the Little Laramie and Sybille Creek." Since 1894 the latter two streams have been entirely appropriated, with the possible exception of some flood water prior to the first of July, yet we now have proof of reclamation of 184,688 acres, nearly double the estimated possibilities at that time. One of two conclusions is unavoidable. Either the duty of water is from two to five times greater on the Laramie River water-shed than in other portions of the State, or proofs of appropriation covering large tracts of land, without application to beneficial use, have been submitted.

RECOMMENDATIONS.

The duty of the water commissioner consists in dividing the water in the natural streams in his District among the several appropriators according to the rights of each as determined by the Board of Control, and in prosecuting these duties in times of scarcity he is required to shut and fasten, under the direction of the Superintendent, such headgates as are not entitled to water by reason of the priority of the rights of others taking water from the same stream. Practically, his work is confined to the latter part of the irrigation season, as during the periods of plentiful supply the appropriators divert and use water without interference with each other. In times of low water, however, his duties become arduous, never particularly pleasant, and more frequently very disagreeable. The unpleasant features are enhanced, and the difficulties attending a successful management of the affairs of his office are increased, by a practice of that very conservatism which is essential to his greatest success.

It is obvious, therefore, that the selection of a good water commissioner requires the most careful consideration, but once having been found and induced to accept office, our laws should be so worded as to furnish every encouragement in the lawful prosecution of his duties that may be consistent with a fair and lawful distribution of water in his charge. They were so intended in the first place and, with few exceptions, learned by experience, have met all requirements. Among these is section 894 of the Revised Statutes. This section provides that commissioners shall not undertake the diversion of water according to the priorities until they have been called upon in writing by two or more owners or managers of ditches or persons controlling ditches in their respective districts. In like manner, Section 971 declares any person guilty of a misdemeanor who shall wilfully open, close or interfere with any headgate or water-box without authority, and provides a fine or imprisonment for infractions of this law.

The administration of the law has demonstrated a necessity for some changes in both of these sections. Referring to Section 894, there appears to be no good reason in law or in equity why one appropriator of water who has complied with all the requirements by constructing his ditch and reclaiming his land and who has, thereafter, built a home upon it, should not be protected in his rights to the full extent that two or more persons are protected. During the season just closed a railway company having the first right upon a certain stream was unable to secure joint action with some other appropriator for the reason, probably, that having first rights, the supply of all the others would be reduced by securing to the company what belonged to it.

In this particular case, recourse was had to the State Engineer and the necessary order issued. In districts remote from the railways, however, a call for the lawful diversion of adjudicated water is necessarily confined to the authority nearest at hand, and Section 894 should be so amended that a water commissioner shall begin his work at the written call of two or more appropriators and may begin at the written call of one appropriator if the reasons given in the call are deemed sufficient. It may be stated that the law was drawn as it now stands under the apprehension that calls for other reasons than those author-

ized by the law would be made. Experience, however, has shown that demands on the commissioner are not made without adequate reason therefor, at least in the mind of the appropriator, and it is believed that a change would be productive of better protection in certain cases.

The necessity for an amendment to Section 971 has been demonstrated by many failures to secure convictions even under the most flagrant violation of both the intent and wording of the statute. These cases have thus far been confined to the justices' courts, where it has been almost uniformly held that unless the State could prove, by eye-witnesses or other indisputable evidence, the opening of the headgate by the defendant, the latter must be discharged. Yet in all these cases the defendant was found using water appropriated by others, against the express orders of the commissioner in charge. These cases appear to be analogous to those of persons found in possession of stolen property, where such possession is regarded in law as prima facie evidence of the guilt of the person or persons in whose possession the property is found. Innocence in such cases is not presumed but must be proven. In like manner the possession and enjoyment of water which clearly belongs to a prior appropriator, the order of the commissioner relative thereto having been lawfully issued, should be punished as a misdemeanor unless the user can establish his innocence in the premises.

It is believed that a much better administration of the law can be secured by a change in this section as suggested above, and it is therefore recommended that Section 971 of the Revised Statutes be so amended that the possession and enjoyment of water, so unlawfully obtained, shall be prima facie evidence of the guilt of the person or persons using it.

In the decision of the Supreme Court respecting water rights, commented upon on another page of this report, the Court makes the following statement and suggestion: "It is probably true that public and private interests will be more securely preserved by a determination in a single proceeding of the right and priorities of every existing claimant; and a law so framed as to effectuate that object and render the decree conclusive of every accrued claim, would douubtless subserve a useful and salutary purpose."

All rights adjudicated by the Board of Control prior to that decision have been established on the assumption that this end was already attained and that any person who failed to appear and present his claim at the time of taking testimony was thereafter estopped from so doing. So it has been held by the Board that the person holding stream priority No. 1 was entitled to the first use of water from the stream; and that the person who held stream priority No. 2 was entitled to the second right, and so on through the entire list of appropriators, and the water commissioners have been so instructed and have diverted the waters according to these determinations. In addition to this, the claimants themselves have also considered their rights as finally settled, so that consequent unsettling of claims and values long established should not be permitted to prevail longer than is necessary to bring about a renewal of those stable conditions, thought previously to prevail. It is therefore recommended that the present law be so amended as to establish the following:

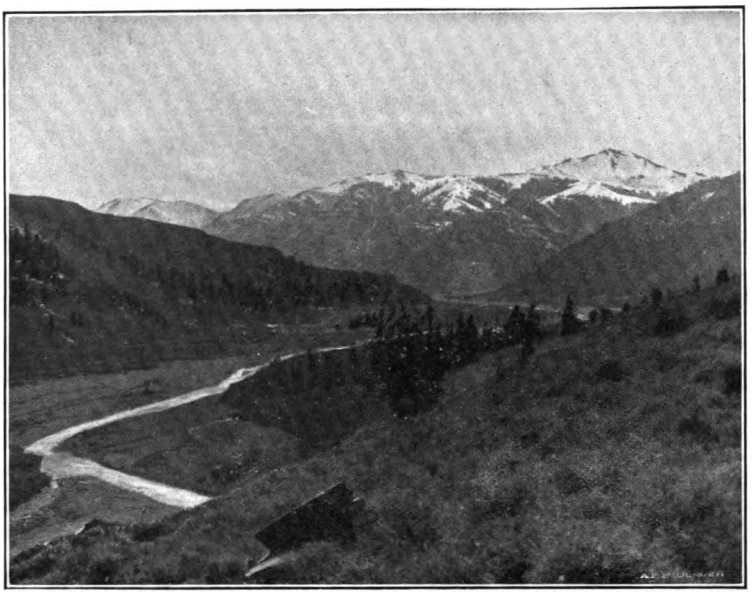
1st. That any person claiming the right to use the water of any stream heretofore adjudicated by the Board of Control, who failed to appear and submit proof of his claims to the Division Superintendent at the time of the adjudication of the waters of the stream from which his diversion is made, shall be allowed one year from the date of the act of amendment, herein contemplated, in which to file a petition for a re-hearing before the Division Superintendent, this re-hearing to be strictly confined to this class of claimants and be for the purpose of submitting his proof of appropriation as is done in the original instance, the same to be subject to contest, to applications for re-hearings and all the operations of the law covering original proofs and the actions of the Board of Control thereon.

2nd. That in adjudications of water rights, hereafter to be made by the Board of Control under the laws, any claimant of water who fails to appear and submit proofs of appropriation to and before the Division Superintendent at the time and place set and lawfully determined for taking these proofs, shall be deemed as having forfeited all rights theretofore claimed by him and he shall be forever estopped and concluded from any rights to water from the stream after the taking of said proofs, unless the same shall be acquired by subsequent appropriation

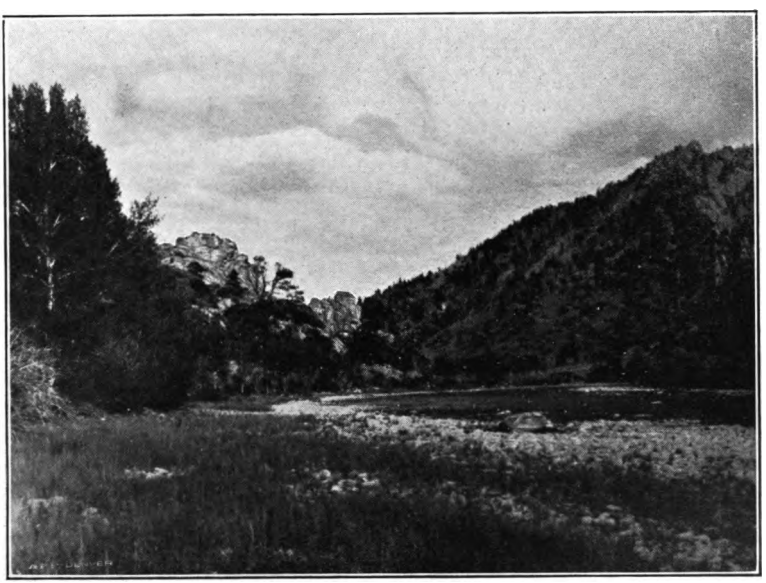
under and by virtue of the State laws governing the acquirement of the use of the State's waters.

The latest requirement of the General Land Office in making proof of the reclamation of desert land involves the furnishing of either a certified copy of the permit under which the water appropriation was made, or a certificate from the State Engineer setting forth the fact that the records of the office show that such completion of ditch and appropriation of water has been made. For the former paper fees are now required, but there is no provision in the law for a fee for any certificate involving a statement as to a showing of the records in the Engineer's office. The law should provide for a fee of $1.00 to be charged by the State Engineer for a certificate of any kind that includes information as to the showing of the official records.

It is recommended that Section 930 of the Revised Statutes be so amended that the owner of a reservoir shall be required to construct and maintain, to the satisfaction of the Division Superintendent of the Division in which the reservoir is situated, a substantial and sufficient measuring device, of a plan to be approved by the State Engineer, in the channel of the stream across which the reservoir is located, both above and below such reservoir site, for the purpose of assisting the water commissioner or superintendent in determining the amount of water which shall be allowed to pass through the dam of such reservoir for the use of prior appropriators; and that upon failure to comply with the instructions of the Division Superintendent the construction shall be done by the County Commissioners and the costs made a charge upon the ditch, to be collected as delinquent taxes, as is also provided in Section 930 for the payment of the cost of construction of measuring devices in ditches. It should also be made the duty of the Water Commissioner to open and keep open the sluice-gate of the reservoir until the full payment of the costs by the owner of the reservoir has been made.



RESERVOIR SITE ON UPPER GREY BULL RIVER.



NORTH PLATTE RIVER AT BENNETT MOUNTAIN.

REPORTS OF SUPERINTENDENTS.

Hon. Fred Bond,
State Engineer.

Sir:—As Superintendent of Water Division No. 1, I herewith submit my report of work in said Division for the two years ending November 30th, 1900.

For the year 1899, little besides routine work was accomplished or required. The most important work has been the adjudication of the rights to water from the Laramie River and its unadjudicated tributaries. This is the most important stream, in respect to the magnitude of the appropriations and number of ditches, in this Division. The fact of its being an interstate stream, having its inception in and by far its largest volume of supply from the State of Colorado renders it of special importance, especially in view of the fact that all its available natural flow, during the height and latter part of the irrigation season, is fully appropriated and applied to beneficial use in this State. A vast amount of available arable land lies along its margin to which no water has yet been applied, and under existing conditions it is not at all probable that any considerable portion of these lands can be reclaimed. This is due to the fact that during the time when water is most needed the very large diversion in Colorado diminishes the flow to such an extent that the lands now under cultivation and irrigation require all the available supply. Were it not for the fact that none of the water diverted by the above mentioned Colorado Canal is applied to use along this stream, but is all carried away into a totally different water-shed, the return seepage from the use of said water along the Laramie River would sufficiently augment its volume so that a very much larger area of land could be reclaimed than is now possible, and would also tend to render existing rights of more lasting value.

The testimony was taken by me in the months of May and June, at Laramie City and Wheatland, the proofs submitted showing the existence of 370 appropriations. By far the larger proportion of these are comparatively small ditches, but there are several very large and costly canals.

At the time of exhibiting the proofs for public inspection, a large number of contests were presented and filed. Some of

these when heard will raise several very important and vital questions in our water laws and the practice of the Board of Control, not hitherto raised or determined, among the most important of which will be the relations or effect of our eixsting State laws upon the laws or customs and practice under the territorial period. As to whether an appropriation which had its inception under territorial laws is a continuing one down to the time when the adjudication was held; that is, whether the amount of an appropriation shall be determined and fixed by the number of acres found to be irrigated and reclaimed only up to the time of the adoption of the State law under the priority of the date when construction began on the ditch or whether it extends to and includes, under such priority, not only the lands watered during the territorial period but also those upon which water was not applied until after the State law went into effect, and is to be measured by the total number of acres watered down to the time of the submission of proof on the adjudication.

Section 918, Chapter 14, Division 1, Title 9, Revised Statutes, provides that "Any person, association or corporation hereafter intending to acquire the right to the beneficial use of the public waters of the State of Wyoming *shall before* commencing the construction of any ditch, canal or other distributing works or performing any work in connection with said construction or proposed appropriation make an application to the State Engineer for a permit to make such appropriation." And Section 929 provides "The priority of such appropriation shall date from the filing of the application in the State Engineer's office." The law seems to be perfectly clear and explicit that any extension of irrigated area after the adoption of the present laws must be under permit from the State Engineer, and take its priority as of the date of filing the same in the State Engineer's office. It follows then that the territorial appropriations must terminate and be governed in amount by the number of acres watered at the time the law above cited went into effect, and that any extension of irrigated area under such territorial ditches made subsequently must be governed by the same. This was the view taken by the Board of Control when it began its work. It has invariably since been adhered to, and has not hitherto been questioned. The proofs, however, of some of the

largest appropriations from Laramie River take issue with the position of the Board, and the question will be fully presented and argued in the hearing of the contests. The testimony in the contests filed with me will be taken in the spring of next year, but it is not expected that the same can be taken in time for submission to the Board at its March meeting in 1901.

The necessity for field supervision and work during the irrigation season of 1900 has been considerable but owing to the very limited appropriation at my disposal, little of it could be properly attended to. Owing to the insufficient appropriation, I have not been able to take any proofs under permits in my Division and the consequent hardships have been much felt by appropriators who are desirous of proving up on their desert land entries, for which purpose they need their certificates of appropriation.

The resignation of the Water Commissioner in District No. 11 at the beginning of the irrigation season, and my inability to procure another man, made it necessary for me to confine what attention I was able to give to this District alone.

Muddy and Bates Creeks, in this District, were unusually short of water, and required and should have had almost constant supervision of a Water Commissioner during the irrigation season. The time I was able to give to them myself was wholly inadequate to properly supervise the distribution of water thereon. The conditions met with in this District, this year, demonstrated clearly the necessity for an amendment to our present law in regard to the regulation of headgates by Water Commissioners in times of shortage of water. The law makes it a misdemeanor to raise or interfere with a headgate which has been closed by the Commissioner, and he is authorized to arrest and prosecute any one so interfering. As the law now stands, it has been found impossible to procure a conviction unless the Commissioner actually saw the appropriator raise his headgate after it had been closed by authority. Since the time which the Commissioner is authorized to expend in any one season is limited, he cannot, after closing the headgates on a stream, patrol it to see that his orders are observed. It has been found that there are almost always some appropriators on a stream who will disregard the Commissioner's orders and as soon as he has gone resume the use of water through their ditches, thus

rendering his action entirely nugatory, and those earlier priorities for the protection of which the Commissioner has closed later ones receive none of the benefits to which the law entitles them. Experience with some of the justices' courts has demonstrated the uselessness of having an appropriator arrested whose headgate is found open after having been closed under authority, unless the Commissioner actually saw him open it, notwithstanding the fact that he is found actually using the water on his land. In other words, the burden of proof is placed upon the Commissioner and he is required to show conclusively that the owner of such ditch actually opened the headgate. For the reasons stated above the Commissioner is unable to do this. The remedy would be to so amend the law that where a headgate has been legally closed by the Water Commissioner, and the same is subsequently found open without authority, and the owner using the water, this fact should be considered as prima facie evidence that the owner opened or caused the same to be opened and that the burden of proof be upon him to show that he did not so open it. Another serious difficulty in the proper administration of the law is the absence, in so many cases, of any sort of headgate. Water Commissioners cannot properly perform the duties required of them unless each ditch is provided with a properly constructed headgate which is susceptible of being tightly closed and locked when necessary. The law makes provision for the construction by each ditch owner of proper and satisfactory headgates, together with a measuring flume for the purpose of rating the ditch, to the end that the Commissioner, when called upon to regulate the ditches on a stream, can fix the headgates at a point which will admit the amount of water to which the ditch is entitled, or close and lock it when necessary. This law is a very necessary one, and would, if complied with, save much expense and trouble in supervision. Unfortunately it is almost wholly disregarded.

Some way should be devised to enable the Superintendent to compel a compliance with the law, the present provision being found inadequate. The necessary work of the Superintendents in each Division has increased each year, while the appropriation to pay for the same has remained stationary, or has diminished. The result has been that much needed work has had to be neglected and left undone, by reason of which loss

and inconvenience has resulted to many appropriators. This has been especially true in my own Division. A great number of ditches, under permits from the State Engineer, have been completed and applications filed for the issuance of certificates of appropriation. I have been compelled to entirely ignore these by reason of the insufficiency of the appropriation for necessary contingent expenses. It will be a very great hardship and injustice to appropriators if provision is not made for taking these proofs the coming year. The appropriators need their certificates to make proof in the land office on their desert entries, and the information obtained is necessary for the State Engineer to enable him to know the condition and extent of appropriations on a stream.

The Legislature at its last session passed a law providing that the Superintendent of Water Division No. 1—being that in which the Capitol is situated—should be Secretary of the Board, and providing that instead of a per diem he be paid a salary. The wisdom of this is apparent, but it should also have provided that the salary be made a separate appropriation, not payable from the per diem appropriation of the Superintendents. The Secretary has, of necessity, to devote his entire time to the duties of the office, and every day not required in the field is needed in office work. It is manifest, therefore, that the appropriation for his compensation should be separate and definite. The work of the Secretary's office has vastly increased in the last four years, and is so increasing with each year. The correspondence and clerical work has now got beyond where it can be disposed of without the assistance of a typewriting machine in the office. The need of this has been felt for two years, but it has been impossible to procure it, since all of the appropriation has been absolutely needed for the necessary field work.

The office is also very badly in need of furniture and fixtures. A separate appropriation should be made for the office in order that these things may be procured, and to provide for the constantly increasing office necessities and occasional clerk hire.

Respectfully submitted,

WM. M. GILCREST,

Superintendent Water Division No. 1
and Secretary Board of Control.

Sundance, Wyo., Dec. 29th, 1900.

Hon. Fred Bond,

Cheyenne, Wyoming.

Dear Sir:—In compliance with your request, I hereby submit to you the report of the condition of Water Division No. 2. During the season of '99, did not generally visit my Division, there being sufficient water in each stream for nearly all of the appropriators, and there was little work for either Commissioner or Superintendent in the Division. During the season of 1900 these conditions were considerably reversed. In most streams the late appropriators had to be closed down before the first crop of alfalfa was matured, Clear Creek, Sand Creek, Big Goose and Tongue River being the exceptions. Consequently the crop this season in this Division was about two-thirds normal. I find as all my predecessors have found, that the all-absorbing problem is how to retain these waters for late irrigation, and can, myself, see but three ways of solving the question. First, preserve the timber upon the mountain sides. Second, by storage reservoirs, and last, by irrigators utilizing the greatest possible amount of the early spring floods. The last seems the only remedy available for the ordinary irrigators.

Now, this year I have taken and examined about forty proofs under permit, finished adjudicating the water of Little Tongue and its tributaries, and find a growing need among the irrigators for the adjudication of Pass Creek, Powder River and the rest of the unadjudicated streams of this Division.

Would recommend that the compelling of appropriators to place headgates in ditches be taken from the hands of the County Commissioners and placed entirely in the hands of the Superintendents, and the limit in which they should comply with that request be reduced to five days.

Attention is called to the present law which requires the Commissioner to regulate the headgates of ditches. In case there is no headgate, the Superintendent is compelled to notify the owner to construct one, and, on his refusal or failure to do so, must then await the tardy action of the Board of County Commissioners. The owner of the ditch is given thirty days in which to comply with the order before the matter can be brought to the attention of the County Commissioners, and then, unless their action is prompt the number of days of immunity which

are, by the present law, given to one inclined to evade its provisions, are so numerous as to enable him to use up the whole irrigating season, and to take all of the water which he desires, regardless of the rights of his neighbors, and in defiance of all efforts of the Water Commissioner and the Division Superintendent to confine him within the limits of what rightfully belongs to him. The full control of the whole matter should be in the hands of one authority, and so long as its control is divided between the irrigation officers and the Board of County Commissioners, just so long there will be delays and a way of escape for the wrong-doer.

The law should also make it a misdemeanor for any one to place any rock or any obstruction in the channel of any stream for the purpose of increasing or diminishing the flow of water in any headgate after the same has been adjusted by the Commissioner or Superintendent.

The result of my observations is that the present system of selecting and leasing lands by the State has, upon the whole, been beneficial. The limited amount of land at the disposal of the Board for selection and the consequent impossibility of supplying more than a very small percentage of the demands, has, in some instances, given rise to complaints and objections which would, I think, disappear if a larger amount of land could be selected and disposed of in such a manner as in a measure to satisfy the actual needs of those desiring it. In my opinion, a system which could proceed gradually to the end desired would be of vast benefit to the whole people. An ideal method would be somewhat as follows:

A grant of ten per cent. of the arid lands within the limits of the State, by the Government, would give the State about 5,000,000 acres to be selected at the rate of 1,000,000 acres per year for five years. This land should be leased as fast as selected at a rental of one and a half to two and a half cents per acre, and with a limitation of two sections in each selection upon sixty per cent. of the land selected. The remaining forty per cent. might be selected in somewhat larger tracts in regions remote from settlement and agriculture. As a rule, no lands should be selected which are at present irrigable or likely to become so by means of irrigation projects. A certain percentage of the income from the rent of such lands should be devoted to

the construction of reservoirs and other irrigation development. The remaining income so derived might be devoted, at least in part, to good roads or school funds. Such a method of disposing of the revenue would answer the objections of those who might be inclined to think that the building of reservoirs would be too much favoritism to those in the locality to be benefitted. It is believed, further, that a grant of the number of acres above indicated would reveal the advantages of the leasing system, and would at the same time remove the objections which have from time to time been expressed on the part of those who have been unable to secure land which they really needed.

Each lease granted by the State should contain such proviso as would enable the Board of Control, when it might be found necessary, to open a private way for driving live stock through each selection, not exceeding 300 feet in width.

The selection and leasing of lands should remain in the hands of the Board of Control as at present. It seems to me that the land system and the water system of the State are inseparable and that the special knowledge acquired in the administration of one branch is of vast benefit in the other. Neither can be administered successfully when entirely separated from the other.

It is believed that the State would be able to construct her own reservoirs if Congress would give to us the right to use our own resources, and a system of selecting and leasing as above indicated is more likely to meet the approval of Congress, at the same time being sufficient for the present needs of the State, than an attempt to secure the grant of all Government lands within the State limits, or for the appropriation of Government aid in building reservoirs.

Yours very respectfully,

F. S. KELLOGG,

Superintendent Water Division No. 2.

Ten Sleep, Wyo., November 21st, 1900.

Hon. Fred Bond,

State Engineer and President Board of Control.

Dear Sir:—As Superintendent Water Division No. 3, I respectfully submit the following report:

During the year 1899, the principal work done in Water Division No. 3 was the adjudication of rights and priorities to water from Owl Creek and tributaries. After due and legal notice had been given, the testimony was taken at Thermopolis and Embar on the 23rd and 25th days of October, respectively, the same being submitted for public inspection at Embar, October 26th, and at Thermopolis on October 28th, due notice of said inspection having been given at the time of taking testimony.

No contests having been filed, all of the testimony was submitted to the Board of Control at its regular meeting in March, 1900, and a decree rendered in conformity with said testimony.

In March, 1900, a re-hearing was granted to Leonard Short by the Board. In this matter the testimony was taken by the Division Superintendent, at Ten Sleep, on the 5th day of September, 1900, and submitted to the Board of Control at its regular meeting in October, 1900, and a decree rendered according to such evidence.

Owing to the fact that Owl Creek is the dividing line between the Shoshone Indian Reservation and Big Horn County, the appropriators from the south bank of the stream and from the tributaries emptying in on the south being under the control of the Federal Government, and the appropriations from the north bank of the stream and from the tributaries emptying in on the north being in Big Horn County, and under State control, there should be an understanding between the State of Wyoming and the Federal Government as to the relative priorities on the different sides of the stream, so that appropriators under State control may know what their priorities are as regards the appropriators on the opposite side of the stream.

In 1900, the work in this Division was confined principally to the adjudication of the Grey Bull River and tributaries, on account of lack of funds to do further field work, there being 229 proofs of appropriation of water taken at Otto and Meeteetse in May, and in August the proofs were duly exposed according to law. No contests being filed, all of the proofs taken were submitted to the Board at its regular meeting in October, 1900, and a decree rendered in conformity with said proofs.

Owing to the light snowfall in the mountains on the headwaters of the Grey Bull River, there was a scarcity of water

there this year, the river being dry from Otto to the mouth. I believe that there was enough water wasted that could have been saved by a competent Water Commissioner to have supplied all of the appropriations on the stream.

The need of an adjudication of the rights from Shell Creek, Willow Creek, Five Springs Creek, Crooked Creek and Bad Water Creek in this Division is very urgent on account of the over-appropriated condition of the streams.

Respectfully submitted,

B. B. MORTON,

Superintendent Water Division No. 3.

ACKNOWLEDGMENTS.

This office is indebted to J. Frank Warner, U. S. Deputy Surveyor, for the surveys of the Piney Lakes. These lakes were surveyed under a Government contract and the results furnished this office without charge.

To the various railroads throughout the State acknowledgments for transportation furnished this office are also due and are herewith made. The interest taken by these companies in the development of the State has resulted in a material increase of the work accomplished by this office.

PERMITS TO APPROPRIATE WATER.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	Acres No. of	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2010	4	George Hawkin	Ham's Fork	1.5	2.5	2	2	15	$ 250	200	1900
2011	1	Steven F. Smith, Adolph Corrao	Box Elder Cr.	1	5	4	1	4		57.5	1899
2012	4	George Waite	Swift Cr.	2	6	5	1	10	75	160	1900
2013	2	G. W. Newell and Geo. Harris.	Tongue River	.75	5	4	1	4	550	60.2	1899
2014	4	H. K. Glidden	Gros Ventre River	2	10	8	1	5.28	320		1901
2015	3	George Marquette	South F'k Shoshone River	.75	3.5	3	.5	5.28	100	50	"
2016	1	Thomas Hutchinson	Alkali Cr.	1.5	8	6	1	5.28	400	95	1900
2017	1	A. E. Ragen	North Platte River	2.08	10	6	2	1.1	2,310	173	1901
2018	3	E. Amoretti, Jr.	Horse Cr.	1.125	3	2	1	3.5	300	50	1899
2019	3	" "	" "	1.25	4	3.5	1	10	350	125	"
2020	1	J. B. Roberts	Nigger Joe Cr.	1	3	2	1	4	300	75	1900
2021	1	B. F. Fuller	Bares Cr.	.6	4	2.5	1.5	5	150	28	1899
2022	3	Geo. and G. E. Greet	Spring Cr.	.69	7	6	1	8	150	224	1901
2023	4	Jos. S. Nelson, Sr.	Nickle Spring Cr.	.75	4	3	2	2	100	40	1900
2024	1	W. J. Miller	Cloud Cr.	1.1	3	2	1	20	350	70	"
2025	3	E. A. Boots	Ditch Cr.	1.25	5	3	1	4	150	110	1899
2026	3	B. F. Bausman, Wm. McComb.	Bridger Cr.	3.25	16	8	5	5	500	347	1900
2027	1	E. Royce, H. Frendenthal and O. Royce	North Platte River	4.75	8	6	1.5	2.5	3,000	627	1902

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2028	3	David Hank and E. A. Boots ..	Ditch Cr.....	1.25	5	3	1	15	$ 150	99	1901
2029	4	L. W. Lincecum, S. F. Lindly and J. W. Lindly, Jones Lindly, G. F. Whitman, G. W. Whiteman and J. Demott	Green River.....	5.25	14	12	1.5	2.4	1,500	1,128	1902
2030	3	H. A. C. Darley	Belknap Cr.....	1.75	6	4	1	5.28	100	90	1899
2031	1	Wm. O'Brien.....	Third Cr.....	2					1,000		
2032	1	F. B. Curtis	Curtis Cr.....		3	2	1	10	50	56	1901
2033	4	Maggie L. Simpson and Peter H. Karnes	Cache Cr.....	.75	5	4	1	10.56	125	200	1900
2034	4	Al and Sadie Osterhout.....	North Piney Cr.....	2.5	3.5	2.5	1.5	48	300	95	"
2035	3	A. D. McCaul	Spring and Jordan Cr....	1.75	2.5	2	.5	5.28	100	38	1900
2036	4	John Wardell	Green River.....	2.75	8	6	1.5	2.75	800	294	1901
2037	2	Mary P. W. Bacon.....	Seepage water, Sec 15, T. 51, R. 82	.5	1.5	1	.66	15	50	20	1899
2038	1	J. W. Dickie	Cloud Cr.....	2.125	6	4	2	10	150	55	1901
2039	1	Horace W. Rate	Badwater Cr.....	.75	5	3	1.5	5	200	54	1899
2040	1	" "	" "	.625	5	3	1.5	5	200	70	"
2041	4	J. H. W. Strong.....	West Fork of New Fork..	.25	5	4	1	4	200	77	"
2042	2	S. R. Stalcup	Cottonwood Cr.....	1	6	4	1	5.28	150	70	"
2043	1	Henry Hasmusson	Springs, Secs. 12, 13, 14, T. 17, R. 88	2	3	2	1	10	200	150	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2044	4	Mrs. Mary Wright and W. C. Wright	Ham's Fork Cr.	1.25	4.5	4	2	6.66	$ 175	185	1899
2045	2	A. A. Hember	Springs, Sec. 6, T. 52, R. 62						75		1900
2046	1	D. J. Sheehan	Springs, Sec. 32, T. 31, R. 91						25		"
2047	2	A. D. Brown	Government Canyon	1.16	3	2	1	6	500	150	1901
2048	1	Clara Foxton	Elkhorn Cr.	.356	5	2	1	5	45	11.5	1900
2049	1	" "	" "	.42	4	2	1	8	35	27	1899
2050	1	" "	" "	.375	4	2	1	8	30	11.5	"
2051	1	" "	" "	.187	4	2			25	11	"
2052	3	R. B. Beck and F. S. VanRiper	Wiggins Fork	4.5	6	5	1	5	2,000	555	1901
2053	1	D. W. Leman	Beaver Cr.	.5					50	12	1900
2054	1	" "	Red Canyon Cr.						50	12	"
2055	1	Russell Thorp, Jr.		.5	2	1	.8	8	125	4	"
2056	2	Louis E. Deolin	Spotted Tail Gulch	1.25	2	1.33	1.17	.25	800		"
2057	2	A. M. Smith	Middle F'k Powder River	1	6	4	1	5.28	700	70.5	1899
2058	1	I. N. Hughes	Horse Cr.	1.625	7	5	1	3.5	320	70	1900
2059	1	Nels P. Nelson	Big Laramie River	2.5	7	5	1	4	750	240	"
2060	1	May King	King Cr.	3.25	6	4	1.5	7	700	455	1899
2061	2	Milo A. Adams	Inyan Kara Cr.		4.5	4	1.8	4	300	135	1901
2062	3	C. M. Jones Hulfield	No Wood Cr.	2.847	15	7	1.5	2	1,000		1902
2063	1	I. C. Miller	O'Brien Springs	.187	4	2	1	5.28	60	14	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2064	4	O. O. Stoddart	Black's Fork Cr	6	12	8	2	5.28	$ 1,500	1844.4	1902
2065	2	S. B. Thomas, Fred Burnett	Sand Cr	1.75	4	3	1	6.5	600	155	1900
2066	1	Wm. O. Newill	Antelope Cr	2	3	2	1	6.5	350	140	1901
2067	1	" "	" "	1	3	2	1	6.5	200	95	"
2068	1	Clara Foxton	Elkhorn Cr	.136	4	2	1	8	20	5.5	1899
2069	4	J. H. Hill	Willow Cr	.75	6	4	1.5	5.28	400	294	1901
2070	2	J. L. Baird	Stockade Beaver Cr	.721	8	4	2	4	300	300	1900
2071	1	Edwin Meredith	Medicine Bow River	4.5	6	4	1.5				1901
2072	1	G. W. Rhoades	Spring Cr. Dam	1.25	2	1	1	15	100	72	"
2073	1	Jas. Atkinson	Pine Gulch	.5	3	1.5	1.5		100	55	1900
2074	1	" "	Camp Cr		1.5	1	1				"
2075	2	Manuel Armenta	Natural Lake	2.5	6	5	1	7	50	158	1901
2076	2	Ole Broberg	North Fork Powder River	.623	3.5	2.5	1	5	250	33.5	"
2077	2	David Q. Cummings	Clear Cr	9	3.5	3	1	10	750	135.4	"
2078	4	Samuel Densley	Lake Cr	1.75	6	4	1	5.28	600	254	"
2079	3	J. G. Borner	Dry Cr	3.5	8	6	1	6	500	541	"
2080	1	Sherman Craner	Sweetwater River	1.9	6	3	1.5	2.64	200	131	"
2081	3	C. T. Jones	Alkali Cr	1.25	3.5	2.5	1	15	200	129	"
2082	4	Wm. Wells	Little Gros Ventre	.75	6	5	1.2	8	400	260	1900
2083	4	" "	" " "	.75	5	4	1	4	250	75	"
2084	2	Emil Krause	Inyan Kara Cr	3	5	4	1	5.25	650	235	1901
2085	4	Wm. Wells	Lime Cr	.75	4	3	1	8	350	193	1902

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2086	3	J. B. Pruyn	Red Gulch	2.25	6	4	1		$ 250	80	1901
2087	2	A. B. Gillespie	North Laramie River		5	4	1	2.5		200	1902
2088	2	" "	" " "	3.25	5	4	1	2.5			"
2089	1	James Davies	Muddy Wagon Hound Cr.	.125	4	3	1	8	100	68	1900
2090	1	" "	" " " "	.25	4	3	1	8	180	42	1901
2091	1	Christian Christiansen	South Fork Sybille Cr.	1.5	10	4	1	4	150	125	"
2092	1	Louis P. Rover	North side " "	1	6	3	1	4	50	90	"
2093	3	Wm. F. Walls	Alkali Cr.	1.25	3.5	2.5	1	6	250	132	"
2094	2	F. W. Avery	Sand Cr.	1.25	3	2	1	6.5	200	33	1900
2095	2	" "	" "	1.5	2.5	2	1	6.5	100	12	1901
2096	2	" "	" "		2.5	2	1	1.5	150	15	"
2097	4	Thos. Poole	Green River	.625	4	3	1	18.8	100	115	"
2098	2	Wm. H. Mathews	Bear Cr.	3	3	3	1.66	4	400	175	1899
2099	4	Denver L. Hysell	Smith's Fork	1.118	4	3	2	4	25	130	1900
2100	1	E. E. Lufkin	Timber Cr.	1	3	2	1.5	50	150	120	"
2101	1	" "	Brush Cr.	.25	1.5	1	1	20	50	40	1901
2102	2	Anthony Stilp	Sand Cr.	2.317	4	3	1	6.5	500	35	"
2103	4	B. G. Griggs	Middle Piney Cr.	.375	6	4	2	6.4	150	85	1900
2104	4	" "	" " "	.75	6	4	1.5	4	200	30	"
2105	1	J. D. Nietfield and H. Nietfield	Laramie River	3.804	14	8	2	1.58	2,750	728	1902
2106	4	George Ryter	Little Gros Ventre	1.25	4	3	1	20	100	134	"
2107	2	Mrs. F. S. Kellogg	Snow water	.396	4	3		80	100	40	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2108	2	C. J. Finch	Sand Cr.	.75	3	2.5	1	3.5	200	60	1900
2109	2	W. H. Nefsy, M. Nefsy, J. Nefsy	Heuston Cr.	1	6	4	2.5	5.25	1,000	170	1901
2110	3	Wm. F. Newbold	Big Sandy River	1.374	5	4	1.5	6	800	100	1900
2111	3	Wm. F. Cody, Nate Salsbury	Shoshone River	109	45	25	10	2	1,000,000	120000	1905
2112	2	J. G. Davis	Middle Fork Powder River	1.5	3	2	1.5	4	250	65	1900
2113	4	H. K. Hoff	West Fork New Fork	.25	4	3	1	5	35	20	"
2114	2	F. C. Kellogg	Surface water	1.116	4	3		80	200	130	1902
2115	1	Martha Olin	Red Canon Cr.	.333	4	2	1	10	75	10	"
2116	1	" "	" " "	.25	4	2	1	10	50	20	"
2117	1	Eric Olin	" " "	.75	4	3	5	10	150	75	"
2118	1	" "	" " "	.375	4	3	.5	10	100	28	"
2119	4	J. L. Stevens	Smith's Fork Cr.	.029	2	1	.66	10	15	60	1901
2120	2	G. W. Westlake	Five Mile Cr.	1.5	3	2	1.5	5	300	45	"
2121	1	A. A. Harper	Whiskey Cr.	2.1	4	2	1	10.56	240	160	"
2122	1	" "	Muddy Cr.	1.3	4	2	1	5.28	110	160	"
2123	4	F. A. Brown	Clear Springs		2	1		25	100		"
2124	4	Mary E. Hepworth	Willow Cr.		3.5	2.5	1	4	160	120	1900
2125	1	Jas. Atkinson	Trail Cr.	.5	2	1.5	1		100	60	"
2126	2	C. A. Scott	North Branch Rocky Ford	3	4	2	1	7	500	640	"
2127	2	Walter Roadifer	Snow water	.965	3	2		60	200	79	1901
2128	2	C. A. Scott	Rocky Ford Cr.	2.5	4	2	1	7	1,000	300	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2129	2	C. A. Scott	South Redwater	1	4	2	1	7	$ 500	320	1901
2130	2	" "	Government Cr.	6	4	2	1	7	1,000	160	"
2131	1	Eliza White	White Cr.	.5	5	3	1	8	100	37	1900
2132	1	" "	" "		5	3	1	8	100	27	"
2133	1	Willard H. White	" "		5	3	1	5	100	98	1901
2134	1	C. A. Guernsey	Fremont Warm Spring						2,500	20	1902
2135	1	L. M. Misters	Field Creek No. 2	28	2	1	1	15	100	49	1900
2136	4	Thos. Cowlishaw	Bear River	7	6	4	1.5	5	1,500	300	1901
2137	2	J. S. Benton	Jackson Cr.	.9	4	2	1	27	125	60	1899
2138	2	" "	" "	1.75	4	3	1	211	100	80	"
2139	4	E. H. Bradshaw, Paston, Thatcher and C. E. Lyons	Middle Beaver Cr.	28.25	5	3	1.5	4	1,000	768	1901
2140	2	Margaret A. Miles	N. Fork Powder River	.75	5	3	2	5	175	75	1900
2141	2	A. M. Oglesby and A. N. Keith	Middle Fork Powder River	.937	5	4	1	5	200	72	1901
2142	1	David Gordon	Horse Shoe Cr.	1	6	4	1	5.3	300	75	1900
2143	1	G. H. Rosentreter	Sybille Cr.	1	5	2.5	1.5	8	100	80	1901
2144	1	C. F. Kanatt	Cow Cr.		4	3	1	10	125	160	1900
2145	4	N. J. Christopherson and Hale	Spring, Kennington Canon	1.25	.25		.25	50	14.5		1902
2146	3	Walter Kepford	Timber Cr.	.75	2	1	1	10.56	50	65	1901
2147	3	" "	South Fork Stinkingwater	.515	2	1	1	5.28	150	20	1900
2148	4	J. A. Boss	Lake Cr.	1.25	6	4	1	8	600	287	1901
2149	3	R. M. Norboe	South Fork Deer Cr.		3	2	.5	10	50	60	1900

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2150	4	W. H. Cox, Amanda Cox, W. P. Francis, J. M. Francis	Pine Cr.	6	10	8	1.5	4	$ 2,000	1,115	1901
2151	1	Nels Nelson	Spring Cr.	.433	3	2	.5	5	100	60	1900
2152	4	E. Wardell and C. F. Zufelt	Smith's Fork Cr.	1.5	7	6	1	12	75	310	"
2153	2	Milton Carter	Five Mile Cr.	1	4	2.5	1	10	50	40	"
2154	2	" "	" " "	1	4	2.5	1	10	50	70	"
2155	4	K. J. Jomen	East Fork of New Fork	2	5	3	1	10	350	150	1901
2156	2	J. R. McDowell	North Fork Powder River	.625	4	3	1	5	50	25	1900
2157	3	J. H. Thompson	Little Warm Spring Cr.	.75	3	3	.5	6.66	250	75	1902
2158	1	Shelby Hoffman, Emil Haberthur, Dr. J. S. Cathin, F. D. Harrington, Dr. J. J. Adams and Dr. H. Miller	N. side N. Blue Grass Cr.	1.375					8,000	640	1900
2159	1	Shelby Hoffman, Emil Haberthur, Dr. G. S. Cathin, F. D. Harrington, Dr. J. J. Adams and Dr. H. Miller	West side of Spring	.8					5,000	640	"
2160	4	F. C. Fisher and C. H. Fisher	Pole Cr.	.625	8	6	1.5	30	400	790	1902
2161	4	" " " " "	" "	7	12	10	1.5	8	2,500	1,985	1903
2162	2	Wm. Triel	Five Mile Cr.	1.25	4	2.5	1	5	100	12	1900
2163	2	Herman Woodward	Branch Five Mile Ditch	.75	4	2.5	1	10.56	40	25	1901
2164	1	Elsie Hendrick and Wm. Keith	Spring Cr.		5	3	1	35	400	30	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2165	1	Wm. Keith	Nigger Cr	.5	5	3	1	10	$ 100	18	1900
2166	1	G. P. Clayton	Batts Cr	3.75	6	4	1	5.28	500	312	"
2167	1	Emma J. Clayton	Hunton Cr	.75	5	3	1	10	100	200	"
2168	4	T. J. Mills and W. E. Mills, Jr.	Fish Cr	2	7	5	1	8	300	342	"
2169	4	" " " " " "	" "	2.75	6	4	1	8	300	210	"
2170	4	W. E. Mills, Jr	" "	.375	5	3	1	8	100	135	"
2171	4	M. F. Loomis	Small spring in Sec. 31, Tp. 37, R. 110	.5	4	3	1	8	250	102	"
2172	4	Mary Wright	Trail Cr	1.5	4.5	4	1	9	100	52	"
2173	3	J. W. Richardson	Middle Branch West Kirby Cr.	.714	5	3	1	4	200	44	"
2174	4	L. Emil Nelson	Kendricks Cr	1.5	3	3	1	25	120	303	"
2175	4	J. J. Rahm	W. Fork New Fork River	2	7	5	1.5	6.66	350	360	"
2176	1	H. A. Burtch	Canyon Cr	.75	4	3	1	7	200	32	"
2177	1	" "	" "	.75	4	3	1	7	200	30	"
2178	1	John Anderson	South Fork Casper Cr	.294	4	2.5	1	8	75	47	"
2179	4	G. W. Kissinger, Fred Lovejoy	Gros Ventre River	2	9	7	1	10.56	300	310	"
2180	3	F. A. Whitney, J. B. Gleaver	Grey Bull River	5	8	5	1.5	5.25	1,000	598	"
2181	4	E. C. Blakeslee and F. A. Ewen	Spring, T. 42 N., R. 115 W.	1.25	5	4	1	2.64	150	85	"
2182	4	Fred E. Weiss	Silver Cr	1	4	3	1.5	80	300	295	1901
2183	4	J. P. and F. H. Sykes	Middle Piney Cr	1	7	5	1	9	250	395	1900
2184	4	J. P. and Ellen Sykes	" " "	1	5	3	1	24	200	300	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width Top	Width Bot'm	Depth	Grade, Feet per Mile			
2185	4	J. P. Sykes and Stephen Daniels	Middle Piney Cr	2	7	5	1.5	6.4	$ 350	446	1900
2186	1	John Blessing	Deer Cr	.5	5	3	1	4	100	30	"
2187	1	E. M. Hicks	S. F'k Little Laramie R.	.88	4	3	1	52.8	200	82.7	"
2188	4	E. M. Combs	Twin Cr	1.35	8	7	1.5	5.28	375	285	"
2189	4	J. L. Fleming, W. M. Fleming, W. M. Johnston and I. J. Walker	North Piney Cr	1.75	8	5	1.5	6	400	625	"
2190	4	D. M. Caldwell	Slough, Bear R	.41	2	1	1	7.92	350	8.39	"
2191	2	C. A. Scott	Snow water, Ogden Gulch	.996	3	2		44	300	137	1901
2192	4	Fred S. Boyce	New Fork	1	6	4	1	4	250	135	1900
2193	4	Michael Lowham	Branch of Mill Cr	.75	3	2	1	8	70	55	"
2194	4	" "	" " "	.75	3	2	1	8	80	45	"
2195	4	H. R. Meeks	Smith's Fork Cr	.1	2	1.5	1	15	20	70	"
2196	4	" "	" " "	.016	2	1	1	8	10	50	"
2197	4	Wasatch Live Stock Company	Dry Cr	3.75	5	3	3	100	500	200	"
2198	4	F. B. Margetts	Spring (Long)	2	4	3	.66	15	100	320	1901
2199	1	Whitehouse & Palmer	Spring Cr	1.33	4	3	1	5.28	300	280	1900
2200	1	" "	" "	1.25	3	2	1	5.28	300	100	"
2201	4	A. L. Gray	Black's Fork River	2.03	4	3	1	8	50	135	"
2202	1	Mary J. Loomis	Little Beaver Cr	2	8	6	1.5	10.56	500	250	"
2203	1	H. R. Hall	Clark's Cr	1	4	3	1.5	23	100	68	"
2204	1	" "	" "	.625	4	3	1	15	50	25	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2205	1	Felix Atkinson	Sheep Cr	2.5	4	3	1	4	$ 250	128	1900
2206	1	" "	" "	3.266	6	5	1	5	600	409	"
2207	1	Wm. E. Finfrock	Mud Springs	.5	4	3	1	4	300	80	"
2208	4	J. I. May, Jas. Budge, J. W. Henry, M. W. Henry and Wm. Bierer	Gros Ventre River	3	12	10	1	5.28	1,000	760	1901
2209	4	Edward Olson	Olson Spring	1.25	.2	.16		10	250	20	"
2210	1	G. H. Arnold	Deer Cr	.5	5	3	1	5.5	100		1900
2211	2	J. H. Duling	Spring Cr	1	1.5		1	80	50	80	"
2212	1	J. F. Crawford	South Fork Casper Cr	1.012	4	3	1	6	200	41	"
2213	3	C. R. Berger	Split Rock Cr	.75	3	1.5	1	8	60	75	"
2214	1	G. J. Wagoner	Muddy Cr	.5	4	3	1	7	60	30	"
2215	1	Jas. Milne	Sinking Springs	.75	4	3	1	10	100	48	"
2216	1	D. J. Smythe	Windy Ridge Cr	.5	5	3	1	8	200	17	"
2217	1	" "	" " "	.7	5	3	1	8	250	34	1901
2218	3	Jos. St. John	Jones Cr	1.5	4	2	1.5	6	200	148	1900
2219	1	Fred B. Collins	Sand Cr	2.75	5	3	3		900	108	"
2220	3	Albert Harmen	East Branch Middle Fork Jones Cr.	1	4	2	1	5	150	85	"
2221	3	" "	West Branch Middle Fork Jones Cr.	1.5	5	3	1	4	300	213	1901
2222	2	H. H. Freeman	Beaver Cr	1.712	6.5	5	1.5	3	500	263	"

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2223	4	A. M. Peterson and Michael....	Black's Fork River	1.07	6	5	1	8	$ 100	305	1900
2224	1	Jas. Atkinson, Jr.....	North Laramie	1	4	3	1	4.5	200	77	"
2225	1	J. Chamberlin.....	Red Rock Spring						150		"
2226	3	Philip Evans	Madison Cr.....	.25	2	1	1	6.66	25	4	1899
2227	3	Otto Chandler	Dry Cr.....	1.25	4	2	1	6.66	200	60	1900
2228	3	" "	" "	1.75	4	2	1	6.66	200	90	1901
2229	3	J. S. Johnson.....	Hoodoo Cr.....	1	4	2	1	8	100	65	1899
2230	1	J. A. Schoonjans.....	Brush Cr.....	1.5	4	2	1.5	3	100	320	1900
2231	3	Wm. C. Pyle.....	Big Wind River.....	1.25	4	4	1	6.6	800	195	"
2232	3	H. S. Cover	Grass Cr.....	1.25	4	2	1	8	250	243	"
2233	1	A. J. Goetz and A. W. Casservan	North Fork Sage Creek...	5	5	3	2	5.5	1,000	396	1901
2234	4	C. J. Allen.....	Meadow Cr.....	.75	4	3	1	10.56	100	160	"
2235	1	J. C. Spry...	Willow Cr.....	.5					5,000		"
2236	1	" "	" "	.75	6	4	1.5	8	1,000		"
2237	1	Alexander Sellars.....	Prager Cr.....	.625	3	2	1	6	100	62	1900
2238	4	H. F. Meyer.....	South Cottonwood.....	.75	6	4	1	8	300	150	1901
2239	4	F. E. Zahner	South Fork Cottonwood..	1.5	4	3	1	32.6	450	108	"
2240	4	Robert Gardner.....	Strawberry Cr.....	.75	3	3	1.5	18	100	160	1900
2241	4	Betty Nelson and J. L. Barber..	Gros Ventre River.....	2.75	10	8	1	10.56	300	480	1901
2242	3	W. W. Rennels	Front Cr.....	2.25	4	4	1	20	300	234	"
2243	2	G. W. Tutty.....	Springs, Sec. 32, Tp. 53, Range 67	2	2.5	2	1	80	300	160	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2244	1	M. L. Center, R. J. Slothower..	Clark Cr.....	2.312	5	3	1.5	5	$ 400	382	1900
2245	4	J. Angus, G. Johnson and B. G. Griggs	Middle Piney Cr.....	3	5.5	5	2	69	350	643	"
2246	4	George Johnson.....	" " "		5	3	1	5.28	150	72	"
2247	2	Edward Douglas	Alkali Spring.....	.63	3	2	1	10	50	130	"
2248	4	Annie Spencer.....	Cottonwood Cr.....	2.75	8	6	1	4	600	266	1902
2249	4	A. C. Stilwell.....	West Birch Cr.....	.58	2	1.5	1	5	200	160	1901
2250	3	I. H. Williams	Sykes Ditch.....	1.5	6	4	1		100	152	1900
2251	3	C. E. Temple.....	West Fork of Clear Cr...	1.625	3	2	1	25	130	147	1901
2252	4	C. P. Rice.....	Smith's Fork Cr.....	.12	1.5	1	.66	8	10	12	1900
2253	1	George Mosgrove.....	Medicine Bow River.....	1.589	3	2	2	1	400	160	"
2254	4	C. P. Rice.....	Smith's Fork Cr.....	.23	3	2	1	15	30	88	"
2255	3	C. D. Adams	Sioux Cr.....	1	3	2	1	25	100	74	1901
2256	1	R. A. Crosthwaite.....	Bear Springs Cr.....	1.5	3	2	1	7	150	40	1900
2257	1	H. T. Hayworth	Canyon Cr.....	1.75	3	2	1	5.28	200	110	"
2258	1	The Octavia Mining Company..	Main Savery Cr.....	2	4	2	1.5	20	2,000	160	1901
2259	4	Wm. T. Alexander.....	South Cottonwood.....	.75	10	8	1	26.5	300	290	"
2260	1	H. R. Hall	North Laramie River.....	1.75	5	3	1.5	5	300	108	"
2261	4	Chas. Shear	North Cottonwood Cr....	1.625	6	4	1	6	500	140	"
2262	4	Clark Logan.....	Henry's Fork	.24	3	2	1	3	100	40	1900
2263	4	Clark Logan.....	" "	.79	3	2	1	3	300	120	"
2265	3	W. W. Eheler.....	Red Bluffs Cr.....	.5	4	2	1	8	100	10	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2266	4	People's Canal Co.	Henry's Fork		10	8	1.5	6.5	$ 5,000	3,920	1902
2267	4	Robert Fitzhugh	South Beaver Cr.	1.5	6	4	1	4	300	265	1901
2268	4	J. A. Lloyd	Sage Cr.	.5	2.5	2	8	10.5	100	40	1900
2269	1	P. H. Schallenberger	Cottonwood Cr.	.775	3	2	1	6	100	21	1901
2270	1	" "	" "	.975	3	2	1	6	100	31	1900
2271	3	J. W. Thomas	Wood River	1	4.5	3	1	8	100	52	"
2272	3	D. B. Sheets	South bank Grey Bull R.	2	6	4	1	7	300	100	"
2273	4	A. M. Hill	Green River	.75	6	4	1.5	4	250	160	"
2274	4	A. M. Hill and Carrie Hill	" "	4	10	8	1	5.28	1,200	432	1901
2275	3	Eugenie Cleophas	Cottonwood Cr.	.5	8	6	1	4	300	275	1900
2276	3	Joe Henry	No Wood River	2	6	5	1	4.28	500	133	"
2277	3	David Shoening	Crawford Cr.	1	2	2	1	20	100	66	"
2278	4	E. J. Herring	Corral Cr.	.5	3.5	3	1	15	100	60	1901
2279	4	Wm. H. Gray	Beaver Cr.		7	4	1.5	8	100	150	1900
2280	4	M. J. and E. V. Kerr and Wm. H. Gray	South Beaver	2.25	8	7	1	6	500	475	1901
2281	1	C. A. Moyer	North Cr.		4	3	1	5.25	200	80	"
2282	3	F. R. McCoy and S. T. Major	Gooseberry Cr.	2.5	3	2	1	6.8	150	125	1900
2283	3	" " " " "	" "	2	3	2	1	6.8	150	60	"
2284	3	G. H. and J. W. Richardson	West Kirby Cr.	2	8	6	1	6	350	145	"
2285	3	J. W. Richardson	Spring Branch Kirby Cr.	.75	3	2	1	7	50	31	"
2286	4	R. S. Null	Pole Cr.	2.25	6	4	1	5.28	500	135	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2287	4	C. Bickel and L. Dickinson	Green River.....	2.25	8	6	1.5	4	$ 1,500	577	1902
2288	1	George Atkinson.....	North Laramie River.....	1.5	5	4	1.5	4.5	250	165	1901
2289	4	W. and J. Stringer.....	Willow Cr.....		12	10	1	8	100	320	1900
2290	1	W. S. Earhart.....	Seepage water	.037					75		"
2291	3	M. E. Doubleday.....	East Spring	.204	1	1	1	10	50	5	"
2292	3	W. M. Doubleday.....	Lyside Cr.	1.5	4	3	1	10	300	125	1901
2293	1	W. M. McRae	Middle F'k Casper Cr....	.5	3	2	1	5	100	40	1900
2294	1	Kenneth McRae.....	Wallace Cr.....	.5	3	2	1	5	100	45	1901
2295	1	L. P. Larry	Springs, Sec. 4, T. 34, R. 82		3	2	1	5	100	40	"
2296	1	D. E. Goddard.....	Spring, Old Woman Cr...	.25	3	2	1.5	6	150	30	1900
2297	4	J. E. Brown.....	North Beaver Cr.....		6	4	1	14.5	250	275	1901
2298	1	J. J. Ortiz.....	No Water Cr.....	1.25	4	3	1	6	200	200	1900
2299	4	P. R. Hoffman.....	Middle Fork Sage Cr.....		2.5	2	.5	10.56	100	95	"
2300	1	A. P. Chenoweth	Reservoir (Bad Water) ...	1	3	2	1	3	100	60	1901
2301	1	Jas. Atkinson, Sr.....	North Cr.....	2.5	3	2	1.5		195		"
2302	3	D. N. Hale and R. A. Baldwin.	Alkali Cr.....	1.37	5	3	1	16	150	150	"
2303	1	Wm. Irwin.....	Blue Grass Cr.....	.75	3				300		1900
2304	1	G. H. Gilland	All Springs on Secs. 16 and 17	.017	4	2	4		50		"
2305	3	Catherine Reck	Meadow Cr.....	.657	3	2	1	10	75	35	1901
2306	4	A. L. DeWitt and E. E. Baylor.	Owl Cr.	2	6	4	1	3.2	250	257.75	1900
2307	1	Donald McDougal.....	Wallace Cr.....	.26	3	2	1	5	50	30	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2308	3	E. E. Baylor and V. L. Purvis..	Owl Cr.....	1.75	6	4	1	3.2	$ 200	228.77	1900
2309	4	J. A. Wall.....	Black's Fork Cr.....	1.72	4	3	1	8	100	160	"
2310	2	D. and W. Eggart.....	North Fork Grand Gulch.	1.2	5	3	1	10.56	350	20	1901
2311	2	" " " "	Smith's Fk. Grand Gulch.	.75	5	3	1	10.56	250	16	"
2312	2	Ella Huntington.....	Springs, Sec. 33, T. 57, R. 87	.75	2	1	1	20	100	80	1900
2313	1	Jas. Allen.....	South Sybille.....	.75	4	2	.5	2	150	25	"
2314	1	E. O. Houck.....	Indian Cr.....	.816	3	2	1	5	150	46	"
2315	1	" "	" "	.861	3	2	1	5	150	47	"
2316	3	F. G. Slack.....	Grey Bull River.....	1.25	3	2	1	10	100	67	1901
2317	4	A. Williams and F. McBride...	Gros Ventre River.....	1.5	9	8	1	10.56	250	320	"
2318	3	M. Rohan.....	Cottonwood Cr.....	3.375	5	3	1	10	200	139	"
2319	3	C. and W. G. Teyhl, J. Refior .	Grey Bull River.....	.855	7	6	1	5.28	545	460.5	1902
2320	4	Susan Renshaw.....	North Piney Cr.....	.25	4	3	1	20	80	53	1901
2321	2	Wm. Hodge.....	North Fork Spring Cr....	.5	4	3	1	5	250	64	"
2322	4	G. H. and Kate Burkhalter	Boulder Cr.....	5.25	6	4	1.5	20	1,200	850	1903
2323	3	T. W. Clark.....	Kirby Cr.....	.771	2	1.5	1	5	150	68	1900
2324	4	Henry Bosey.....	North Piney Cr.....	1	5	4	1.5	27.5	350	320	1901
2325	3	A. Kanson.....	Poison Cr.....	.351	2	1.5	1	10	50	25	1900
2326	4	C. K and F. Mills, Delia Daniels and Christian J. Nelson	North Piney Cr.....	2.29	8	5	1.5	13	500	773	1901
2327	2	Wm. Hodge.....	North Fork of Spring Cr..	.5	5	4	1	5	275	80	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2328	3	J. and D. Williams and L. A. Mansean	Torrey Cr.	4	7	5	1	24	$ 1,000	650	1900
2329	3	Wm. K. Carson	Big Wind River	1.5	5	3	1	8	250	75	"
2330	3	O. G. Green	" " "	2	5	3	1	6.33	250	105	"
2331	3	R. Green, O. G. Green and Sarah J. Green	" " "	4	8	6	1	12	1,500	430	"
2332	1	M. J. Gothberg	Sheep Cr.	.25	2	1	1	7	75	5	"
2333	4	L. W. and E. E. Blakesley, Mrs. O. A. Blakesley, S. W. Lite	Grey Bull River	4.213	9	8	1	7.64	586.5	633	1901
2334	4	O. and J. Swanson, J. H. Kennington and A. M. Nielson	Dry Cr.	1.25	5	4	1	15	100	120	"
2335	4	Lee Daniels	North Piney Cr.	.575	5	3	1.5	13	150	200	"
2336	3	Robt. Bragg	Lost Cabin	2	3	2	1	20	300	152	"
2337	3	W. Thayer and Chas. Blynn	Grey Bull River	4.25	5	4	1	5	700	297	"
2338	1	Robt. Vietch	Flood water, Cow Hollow	.8	6	4	1	8	100	105	"
2339	2	Mary Ogden	Spring Gulch	.125	3	2		80	50	10	1900
2340	4	Lewis Travis	Middle Piney Cr.	.375	5	3	1	8	100	94	1901
2341	4	" "	" " "	.25	4	3	1	19	80	65	1900
2342	3	Jacob Johnson	Luman Cr.	65	3	2	.83	108	150	38	"
2343	4	J. H. Overy	Willow Cr.		3	2	1	6	25	70	1901
2344	3	" "	" "	.969	4	3	2	3	30	80	"
2345	3	Jared Williams	Beaver Cr.	1.5	3.5	2	1	5.3	400	50	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2346	4	M. F. Loomis	Tributary Green River	.5	4	3	1	8	$ 200	25	1900
2347	4	Kate Travis	North Piney Cr	.25	7	4	1	4	80	95	1901
2348	3	O. McClellan	No Wood Cr	1.75	5	4	1	15	500	81	"
2349	3	Wirt Brown	Big Horn River	1	6	4	1	5.3	300	130	"
2350	3	C. J. Babb	Red Gulch Cr	2	5	3	1	6	250	196	"
2351	1	David Cochran	McFarlane Cr	.5	3		1	7	50	25	1900
2352	1	Janet McFarlane	South Fork McFarlane Cr.	.5	2.5	2	1	20	25	15	"
2353	1	Thomas McFarlane	M. Fork McFarlane Cr.	.5	3		1	25	25	13	"
2354	1	D. R. and Clara Sutphin	Willow Cr	.6	5	3	1	8	100	26	1901
2355	1	" " " "	" "	1.5	5	3	1	8	300	70	"
2356	1	Hanna Johnson	Johnson Cr	.45	5	3	1	15	100	36	"
2357	1	" "	" "	.15	4	2	1	15	50	8	1900
2358	1	G. Walkinshaw and G. Deboe	Deer Cr	1	7	5	1	4	200	92	"
2359	1	Al Smith	North Platte River	2	15	8	4	10	1,000	200	"
2360	1	A. Cheesbrough	Bridge Cr	.75	4	3	1	25	120	160	"
2361	1	Maria Cheesbrough	Fish Cr	.5	4	3	1	25	120	120	"
2362	3	Mabel Starks	Squaw Cr	1.5	4	3	1.5	20	200	100	"
2363	3	Percy Shallenberger	South Fork Otter Cr	1.5	4	3	1	20	300	140	1901
2364	4	S. A. Slate	Green River	.75	4	3	1	40	200	165	"
2365	4	A. Price	" "	.625	7	5	1.5	4	300	290	"
2366	4	J. L. Carpenter	Black's Fork Cr	.14	4	3	1	8	30	160	"
2367	3	O. J. Palmer and R. Johnson	Alkali Cr	2.25	7	5	1	6	250	247	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width Top	Width Bot'm	Depth	Grade Feet per Mile			
2368	3	G. S. Mills	Spring, Sec 30, T. 31, R. 97 West	.5	2	1	1	6.66	$ 25	10	1900
2369	3	H. M. Bowers	Dick Cr.	1.5	4	2.5	2	8	750	115	1901
2370	1	John T. Grieve	Casper Cr.	1	4	3	1	7	300	86	"
2371	1	Wm. and Janet Grieve	Poison Spider Cr.	1.6	3.5	2.5	1	15	200	140	1900
2372	4	G. L. and M. Hennick	Green River	3.5	8	6	1.5	5	750	592	1902
2373	4	O. M. and P. P. Twichel	LaBarge Cr.	2.5	6	4	1	4	500	135	1901
2374	1	E. P. Hughes	Springs, Sec. 4, T. 24, R. 64	.5	3	2	1	100	50	60	1900
2375	3	J. M. White, Alex Alexander	Indian Cr.	1.5	3	2	1.5	10	750	100	"
2376	3	A. E. Chessman, J. M. White	Wood River	2	2.5	1.5	1	10	500	90	"
2377	3	A. E. Chessman, Miner Manrle.	" "	2	4	2.5	1.5	10	1,000	208	"
2378	3	J. W. Michie and H. A. Thomas	" "	7	5	3	1.5	10	1,000	380	1901
2379	4	Wm. A. Carter	Three springs, Sec. 33, Tp. 15, R. 118	.75					800		1900
2380	3	I. M. Graham	Long Cr	2.25	4	2.5	1	6.33	350	155	1902
2381	3	G. W. Jensen	Jensen Cr.	.75	5	3.5	1		150	160	1901
2382	3	A. C. Thomas and The Weld Co. Savings Bank of Greeley	Arm of Wood River	.5	2	1.5	1	5	250	55	1900
2383	1	Jennie Lany	South Fork Casper Cr.	1	5	3	1	10	250	115	1901
2384	4	Fritz Stender	Red Canyon Cr.	.875	5	4	1	8	175	108	"
2385	1	John Arnold	Deer Cr.	.375	4	2	1	8	50	27	1899

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2386	1	Mollie Coleman	Cottonwood Cr	.737	6	4	1	8	$ 100	60	1900
2387	1	J. S. Grigg	Willow Cr	1	4	3	1	5	250	68	1901
2388	3	G. W. Wise	Meeteetse Cr	.75	3	1.5	1	10	300	45	1900
2389	3	John Shelly	Sulphur Springs Cr	1.25	2	1.5	.5	10	200	210	"
2390	1	A. L. Evans, H. Clark, H. McFarland, J. Milliken, T. R. and Wm. Jackson, J. M. Green and Samuel Dickinson	Small Tributary Battle Cr.	.29	1.5	1	.5	20	75		1901
2391	3	Laing and Crossley	Lone Tree Cr	3	4	4	1	20	300	319	"
2392	2	Mary E. Sutton	Main Powder River	1.1	6.6	5	1.5	4	500	210	1900
2393	2	A. E. and M. Sutton	Sutton Reservoir	1.75	5	4	1.5	8	1,200	265	1901
2394	1	James Canagher	Bear Cr	.5	4	3	1.5	2.5	100	20	1899
2395	3	" "	" "	.75	2.5			20	100	30	"
2396	4	M. Madden and Woodruff	Poison Cr	.5	2	2	1	10	50	46	1900
2397	1	Paul Morse	Taylor Cr	1	8	6	1	10	150	240	1901
2398	1	Wm. Burkett	Elkhorn Cr	.75	5	4	1	3	100	16	1900
2399	1	" "	" "	1.5	4	3	1	3	200	36	1901
2400	4	P. C. Hansen	Granite Cr	2	7	6	1		250	250	"
2401	4	" "	Two small streams, Sec. 24, Tp. 42 N., R. 117 W.	.5	3	2.5	1		50	30	"
2402	3	J. W. Cheever	Bad Water Cr	1.43	4	3	1.5	6	400		"
2403	2	Linna Madison	Crazy Horse Cr	1.25	4	3	1	5	350	82	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2404	2	Linna Madison	Rattlesnake Cr.	.75	4	3	1	5	$ 300	36.25	1900
2405	3	Merrian, Madden & Woodruff	Poison Cr.								
2406	3	B. F. Ayers	No Wood Cr.	.75	4	3	1	6	500	74	1901
2407	1	J. W. Case	Brush Cr.	1	3	2	1	8	150	120	1900
2408	2	J. H. Foley	Big Draw Spring	1.75	5	3	1	10.56	500	88.5	1901
2409	1	F. A. and L. A. Newell	Antelope Cr.	2.25	5	4	1.5	7	800	297	1900
2410	1	Sarah A. Newell	Cottonwood Cr.	.721	4	3	1.5	6	400	69	1901
2411	3	E. E. Chatfield	Spring Cr.	2.25	6	4	1	6	300	168	"
2412	3	W. M. and M. J. Harvard	Deep Cr.	1.666	5	4	1	6.5	400	100	"
2413	1	E. M. Yates	Laramie River	2.5	6	4	1	2.64	1,000	103	"
2414	1	Jos. Clarkson	Poison Spring Cr.	1.5	3	2	1	8	150	163	1900
2415	3	Wm. M. Harvard	No Wood River	5	5	4	1	6.5	1,200	180	1901
2416	4	S. N. W. Butterfield	Black's Fork River	2.59	5	4	1	8	150	160	"
2417	4	James Francis	Raymond Cr.	3.25	4	3	1.5	8	200	152	"
2418	2	M. E. Bard	Jennings Gulch	4	4	2	1	15.48	150	75	1900
2419	4	Agnes Cunningham	S. Channel Smith's Fork	.017	4	3	1	4	20	160	"
2420	4	J. L. Stevens	E. " " "		2	1.5	1	8	25	52	"
2421	3	H. O. and M. L. Thompson	Sage Creek	2.5	6	4	1	6	500	520	1901
2422	3	J. B. Okie	Alkali Spring	.1	.5	.5	.5	12	50	15	1900
2423	3	G. G. Thompson	Bennett Cr.	1	5	4	1	8	100	150	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2424	3	E. A. Vickery, H. E. Bunn, B. T. Jachary, P. Black, R. B. Heritage, W. C. Hinshaw and C. B. Faulkner....	Stinking Water River....	3.25	11	9	1	20	$ 500	743	1900
2426	3	N. Cunnington, A. Anderson and G. West	Big Horn River.....	1.75	10	8	1.5	3.2	450	406	1902
2427	2	L. L. Gantz	Buffalo Cr.....		3	2	1	7	200	80	1900
2428	2	M. E. Gantz.....	Cottonwood Cr.....		3	2	1	7	200	52	"
2429	4	Chas. Pate	Pate Springs	4 feet	1.5	1	.5	8	5	49	"
2430	3	G. G. Marston.....	North Fork Stinkingwater		4	3	1	5.28	700	175	1902
2431	3	C. B. Williams	Beaver Cr.....	1.25	4.5	2.3	1	8	300	53	1900
2432	3	Frank Bodie.....	Dry Cr. (East Fork).....	.75	3	2	1.5	16	200	15	"
2433	2	E. S. Simmons.....	South branch south fork Crazy Woman	1.5	5	3	1	5.28	400	71.8	1901
2434	3	Joe Johns	Fourth fork Dry Cr.....	1.375	4	2	1.5	20	300	25	1900
2435	3	" "	Branch Dry Cr.....	.25	3	2	1.5	30	100	25	"
2436	3	Wm. Madden.....	Dry Cr.....	.75	5.5	3.5	2	16	50	30	"
2437	2	Carrie S. Simmons	Spring, Sec. 22, Tp. 46, Range 83	.75	5	3	1	5.28	200	112.8	"
2438	3	Otto Chandler	Badwater Cr.....	2	5	2.5	2	16	600	35	1901
2439	1	T. G. Powers	Rawhide Cr.....	1.057	13	10	1	2	600	680	"
2440	2	J. S. McWilliams	Steel Cr.....	1	5	3	1	10.56	200	22.8	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2441	1	Henry Barnhart	Luman Cr.	.75	3	2	1.5	10	$ 300		1901
2442	3	W. O. and Ella Moon	Gooseberry Cr.	3	10	8	1	3.2	500	375	"
2443	3	H. G. and G. Hillberry	" "	2.5	8	7	1.5	3	400	388	"
2444	3	O. B. Mann	Buffalo Cr.	.75	3	2	1	7.5	100	38	"
2445	1	Major Ormsby	Spring Cr.	.625	3	2	1	40	150	24	1900
2446	4	J. W. Adler	Little Gros Ventre	1.5	6	5	1.5	12	400	140	1901
2447	3	Minnie McMannis	Owl Cr.	1.25	5	3	1	4	400	112	"
2448	1	J. S. Vidal	Black Rock Cr.	.75	4	2	1	5	150	39	1900
2449	3	B. Martin, E. A. McCumber and Chas. McCumber	Mud Cr.	3	7	1	5	.18	600	397	"
2450	1	J. U. Woodbury	Snake River	3.5	8	6	1.5	3	1,500	300	"
2451	2	J. Faehndrich Ditch Company	Fiddler Cr.	4.25	4	3	1	8	1,500		1901
2452	1	G. G. VonOrtwick	Laramie River	1.113	3.33	2	.66	2.5	250	50	1900
2453	3	H. A. Munstermann and C. Fredericks	Grey Bull River	1.5	3	2	1	10.56	150	84.5	1901
2454	2	Jacob Affalter	North Fork Powder River	2.5	6	4	1	5.28	750	129.1	"
2455	4	Hudson W. Darrah	Carter Cr.	2	4	2	.66		250	60	1902
2456	4	Jeremiah Godfry	Spring Cr.	1	5	3	1.5	10	100	77.5	1900
2457	1	H. H. Johnston	Spring, Sec. 36, Tp. 19, R. 63 W.						25		"
2458	4	Orson Strong	Smith's Fork Cr.	.068	2	1.5	.66	6	25	33	1901
2459	2	J. L. Mitchell and H. Corbett	Redwater	2.25	3	2	1	3.5	300	70	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2460	2	E. C. Daley	Branch Old Woman Cr.	.5	3	2	1	6	$ 150	5	1900
2461	1	W. Hargraves	Spring, Sec. 14 and 15, T. 28 N., R. 63 W.	.75	3	2	1.5	6	300	40	"
2462	2	Jesse M. Cornelison	Hay Cr.	2.125	4	3	1	8	300	210	1901
2463	4	T. A. Welch	Lane's Meadow Spring	1	3	2	1.5	6	300	400	"
2464	3	C. W. Hooker	Stinkingwater River	1.75	7	5	1	6	300	308	"
2465	3	D. H. Wilson	Meeteetse Cr.	1.75	6	4	1		300	138	"
2466	1	G. D. Nicholson	Sage Cr.	.75	3	2	1	14	100	70	"
2467	3	D. H. Wilson	Meeteetse Cr.	1	5	3	1	10	200	87	"
2468	3	C. P. Sheehan	Sage Hen Cr.	.88	5	2	1	5.28	90	108	"
2469	3	L. and B. Short and C. Heiden	Owl Cr.	1.5	5	3	1	5	250	169	1900
2470	3	D. W. Cook and R. M. Ellis	Paint Rock Cr.	1.75	15	4	5.1	6	600	236.4	1901
2471	1	U. P. Railroad Co.		1.34					450		1899
2472	3	Patrick McKenna	Diamond Spring	.256	4	1	1	5.28	50	13	1900
2473	3	" "	East Diamond Springs	.55	4	1	1	5.28	100	31	"
2474	3	F. A. Whitney	Rawhide Cr.	1.5	3	2	1.5	10	250	50	1901
2475	1	Ella A. Hagge	Elkhorn Cr.	1.77	7	5	1	6.6	500	72	1900
2476	1	F. J. Hagge	" "	1.643	7	5	1	6.6	350	117	"
2477	1	Chris Gabrielson	Gabrielson's Spring	.375	2	1.5	1	2	20	79	"
2478	1	John Clark	Cottonwood Cr.	1.25	3	2	1	7	300	105	1901
2479	1	Bertha Clark	Davis Cr.	1	3	2	1	7	300	123	"
2480	2	A. D. Brown	Sage Hen Cr.	1	3	2	1		300	65	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2481	2	W. C. Robinson	Flood water in South Fork Hay Cr.	.118	4	3	2	7	$ 75	80	1900
2482	2	" "	South Fork Hay Cr.	.848	4	3		5	200	80	1901
2483	3	J. M. Reid	Crooked Cr.	1	5	2	1.25	8	1,200	215	"
2484	1	J. L. Parker	Spring, Sec. 14, Tp. 16, R. 85 W.	.5	4	2	1	5.28	200	40	1900
2485	2	J. L. Pate	Old Woman Cr.	.75	2.5	2	1.5	10	100	20	1901
2486	1	E. M. Irwin	N. W. of Little Canyon Cr	1.25	4	3	.33	3	200	100	"
2487	4	T. S. Taliaferro, Jr	Silver Cr.	.956	5	4.5	1	13.5	200	160	"
2488	3	J. Prettyman	Grey Bull River	1.5	3	2.5	1.5	12	100	40	"
2489	1	John Nolan	Spring in Dry West Sage Hen	.75	5	2	1	5.28	75	59	"
2490	4	E. E. Hill	Fish Cr.	1.25	5	4	1	6.66	200	300	"
2491	1	J. L. McIntosh	Alla Springs	.6	5	2	1	5.28	60	20	1900
2492	1	Nora McKinney	Sweetwater River	.125	2	1.5	.8	5	25	12	1901
2493	1	" "	" "	.375	3	2	1	8	175	24	1900
2494	1	Herman Weber	Spring Wild Cat Gulch	.587	2	.5	2.5	10	300	20	1901
2495	4	Q. W. Garner	Jones Cr.	15 feet	4	3	1	7	20	160	"
2496	3	J. W. Stuchell	Meadow Cr.	1.75	4	2	1.8	25	200	42	"
2497	3	George Driver	" "	1.5	4.5	2.5	2.25	10	500	61	"
2498	3	John Ivens	East Fork Cottonwood	1.25	3.5	1.5	1	8	125	40	"
2499	3	Wm. Fieldon	Box Elder	1.25	4	2	1	8	150	65	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2500	3	John Carmody	East Fork Cottonwood	1.25	3.5	1.5	1	8	$ 150	60	1901
2501	1	T. S. Garratt	North Laramie	.5	4		1	15	100	30	"
2502	1	John Wails	Middle Cottonwood Cr.	1.66	5	3	1	10.56	200	59	"
2503	1	Otto Olson	Seepage water	.75	5	3	1	20	30	160	1900
2504	3	R. M. Kent	Big Horn River	1.25	6	4	1	3	500	134	1901
2505	1	Bernice Grazley	Reservoir	1.5	3	2	1	5	200	194	"
2506	1	J. H. Bowles	South Fork Little Medicine Cr.	1	3	2	1	7	150	170	"
2507	1	" "	South Fork Little Medicine Cr.	1	3	2	1	7	150	95	"
2508	2	Ogalalla S. and C. Co.	Water holes on main branch Little Wind River								
2509	2	" " " " "	Red Rocks Springs								
2510	2	" " " " "	Pine Tree Spring								
2511	2	" " " " "	Spring, South Fork of Little Wind River								
2512	2	" " " " "	Spring at Forks of Little Wind River								
2513	2	" " " " "	Spring, Middle Fork Little Wind River								
2514	2	Joseph Bellivean	Redwater	1.087	3.5	2		4	800	60	1901
2515	1	D. J. Sheehan	Sweetwater River	2.95	9	4	1	5.28	400	407	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width Top	Width Bot'm	Depth	Grade Feet per Mile			
2516	4	A. T. and J. T. F. Barry	Craven Cr.	1.5	5	3	1	8	$ 150	107	1900
2517	4	E. H. Shidler	Spring branch N. Piney Cr	.75	4	3	1	22	159	90	1901
2518	4	" "	" " " " "	.375	3	2	1	30	100	50	1900
2519	4	" "	North Piney Cr.	7	7	5	1	16	250	160	1901
2520	4	David Menkiney	Little Bitter Cr.	1.326	2.5	2	1.16	27	300	160	"
2521	3	Russell Kimball	Pat O'Hara Cr.	1.125	4	3	1	9	500	177.5	"
2522	1	F. W. Johnston	Fish Cr.	.363	3	2	1		40	60	1900
2523	1	Amelia Davis	Duck Cr.	.75	5	3	1	8	50	25	1901
2524	1	" "	" "	1.75	6	4	1	8	150	86	"
2525	4	H. J. B. Taylor, Dell Gehove	Smith's Fork (N. C.)	.79	5	4	1	10	40	180	"
2526	1	Chas. Scharick	Spring Cr.	1.952	3.5	3	.66	6	75	60	1900
2527	1	" "	" "	.421	2.5	2	.66	6	50	40	"
2528	4	Wm. H. Byrne	Albert Creek	.028	3	2.5	.75	6	15	46	"
2529	4	" " "	Seepage from Albert Cr.	.137	2.5	2	.75	6	10	75	1901
2530	4	" " "	Spring, Sec. 17, Tp. 16, R. 118 W.	.028	.66	.5	.25	8	5	.5	1900
2531	4	W. H. and C. L. Byrne	Little Muddy Cr.	.59	5	4	1	8	75	107	1901
2532	4	Wm. H. Byrne	Spring, Sec. 17, Tp. 16, R. 118 W.	.018	.66	.5	.25	8	2	1	1900
2532 B	1	S. L. Hawes	Dry Cr.	1.5	4	3	1	7	300	245	1901
2533	3	D. E. Fuller	Bad Water Cr.	1.75	6	5	1	6	500	137	1902
2534	1	Fred Katzer	Long Draw Cr.	1.75	6	4	1	5	250	140	"

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2535	4	Rose Cranney	Spring Cr	.25	2	1	1	20	$ 25	30	1902
2536	1	A. M. Phelps	Sybille Cr	1.25	5	3	1	5.28	100	68.1	"
2537	1	Eagle Mt. Cattle Co	Antelope Cr	.5	4		1	7	200	30	1900
2538	3	E. E. Lundgreen	West Bridger Cr	1.75	4	2	1	4	250	117	"
2539	3	Wm. M. and Lucy Hale	Owl Cr	2.5	8	6	1.5	4	900	488.65	1902
2540	2	J. G. Davis	Beaver Cr	1.987	5	4	1.5	6.66	600	77	"
2541	1	Milton Sowash	Taggert Cr	.25	1	1	5	6	50	12	1900
2542	1	J. H. McElhany	Seepage water Sec. 4, Tp. 24, R. 68	.75	5	3	1	25	25	80	"
2543	4	J. L. Bess and C. Snow	Green River	3	10	8	2	3	1,500	773	1901
2544	4	G. M. and H. Winkeman, C. F. Hackenburg, Wm. S. Field	Cottonwood Cr	2.5	11	8	1.5	2.7	1,200	868	1902
2545	3	Riley Coop	Kirby Cr	.912	3.5	2	2	6.66	250	44	1901
2546	2	Eliza J. Watt	Box Elder	2	6	4	1.5	4.5	600	180	1900
2547	3	E. C. Cummings	Badwater Cr	1.25	4	3	1	6	600	110	1901
2548	3	J. E. Jensen	Line Cr	2	7	5	1	8	300	308	"
2549	3	Matt Wagoner	Little Rocky Cr	2	4	3	1	6	500	116	"
2550	3	Archy Beaton	New Myers Cr	.312	3	2	1	8	50	15	1900
2551	3	John Tighe	Paint Cr	1.25	5	3	1	.5	150	92	1901
2552	3	Archy Beaton	Sheep Cr	1.25	5	3	1	8	200	123	"
2553	3	M. T. L. Davenport	Paint Cr	.75	5	3	1	10	100	65	"
2554	3	S. S. Cortson	" "	2.5	5	3.5	1	8	300	236	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2555	1	Fred Viele	Cottonwood Cr.	4.43	6	3	1.5	5.28	$ 450	160	1901
2556	2	Ernest Bostleman	Badwater Cr.	1.75	4	3	1	7	300	66	"
2557	2	" "	" "	1.25	4	3	1	7	200	70	"
2558	1	H. A. Faulkner	Mudd Springs	.37	2	1.5	1	5	25	17	1900
2559	3	Thos. Balmer	Spring Cr.	1	3	2	1	15	100	91	1901
2560	4	Wm. S. Field	Cottonwood Cr.	.75	5	3	1 5	13.3	75	135	"
2561	3	Wm. Madden	Dry Cr.	.625	3	2.5	1.5	6.66	300	46	"
2562	3	Otto Chandler	" "	.887	2.5	2	1.5	6.66	150	29	"
2563	3	F. A. Jenks	Trapper Cr.	1.5	4	2	1	60	300	63	"
2564	4	E. T. Campbell	Spring Cr.	2	6	4	1.5	8	200	220	1900
2565	3	F. C. Bartell	North Fork Owl Cr.	1.5	5	3	1	10	200	77	"
2566	2	George Berhofer	Springs, Sec. 6, Tp. 51 N., R. 61 W.	2	1.5	1	1	80	200	40	1901
2567	1	J. I. Brown	French Cr.	2.5	4	2	2	6	1,500	160	1902
2568	4	Chas. Kingston	Shoshone River	30.48	25	15	5	2	40,000	17,755	1904
2569	3	Wm. I. Lewis	Lysite Cr.	.9	2.5	2	2	6.66	200	38	1901
2571	3	Quincy Hooker, Alexander Roane, Jas. Roane, G. W. Roane, Edw. Roane, Bertha Roane, J. P. Thomas and E. Hesser	Stinkingwater River	7.25	10	9	1.5	3.5	4,000	1,105	Not Approved
2572	3	Wm. I. Lewis	Lysite Cr.	.775	3	2	1.25	6.66	200	20	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2573	4	DeF. Richards, Jesse Knight and F. Chatterton	Big Sandy River		45	35	4	1.5	$ 100,000	75,000	1904
2574	4	DeF. Richards, Jesse Knight and F. Chatterton	" " "		45	35	4	1.5	100,000	100000	1904
2575	3	Frank A. Merriam	Iron Springs	.25	1.5	1	1	10	50	8	1900
2576	4	J. H. Martin	Spring Cr.	.234	2	1.5	1	14	100	120	1901
2577	4	" "	Meadow Springs	1.5	2	1.5	1	20	200	160	"
2578	3	Christ Heiden, Jr.	North Fork Owl Cr.	.75	4	2	1	12	100	75	"
2579	4	W. L. Turpin	Little Beaver Cr	2	5	3	1	8	150	80	"
2580	4	Wm. G. and Cola Warren	North Piney Cr.	2.5	7	5	1	22.7	800	340	"
2581	4	L. E. Lockwood	Trail Cr.	1.75	6	4	1	10.56	250	235	1903
2582	4	Vina C. and F. L. Bedier	North Piney Cr.	1	6	4	1	8	350	439	1901
2583	2	J. K. Potts	Pass Cr.	1.5	6	4	1	5.28	700	92	1902
2584	4	W. H. Wyman	Garet Springs and surplus and waste water of Birch Cr.	2.75	4	3	1	6.5	600	300	"
2585	2	J. M. Rouser	Redwater Cr.	1.75	2.5	2	1	60	150	50	1901
2586	3	Walter Punteney	Bridger Cr.	1.25	4	2.5	.3	3.33	350	57.45	"
2587	4	M. W. Pettigrew	Spring Cr.	1.5	8	6	1	15	100	300	"
2588	3	H. W. Myers	Alkali Cr.	1		4	1	6	200	59	"
2589	3	G. L. Berry	Bennett Cr.	2	4	3	1.5	7	500	320	"
2590	4	J. C. Reynolds	Duck Cr.	1.5	10	8	1	8	600	290	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2591	4	F. M. DeLand	Snake River	3	10	8	1.5	5.28	$ 300	305	1902
2592	1	W. S. Earhart	Seepage water, Sec. 34, Tp. 25, R. 86	.284					130	30	
2593	1	John Goetz	Sand Cr.	2	9	7	1	5	600	225	1900
2594	2	G. F. Hobbs	Rawhide Cr.	.328	5	3	1.5		500	8	1901
2595	1	G. A. Froehner	Stinking Cr.	.806	5.5	3.5	1	11	125	62	"
2596	3	H. L. Kenison and F. G. Huntington	Grey Bull River	1.5	5	3	1	5.25	150	185	"
2597	3	Edward Young	Gable Springs	1.5	3	2	1	14	50	45	"
2598	3	" "	Orchard Springs	.5	3	2	1	14	50	5	"
2599	1	John Arnold	Springs, Sec. 33, T. 33, R. 79	.5	1	.25	1	7	25	58	"
2600	4	F. P. Hancey	Soldier Cr.	.5	3	2	.5	15	50	50	"
2601	1	Lynn Roberts	Dry Cr.	2	5	2.5	1.5	1.33	500		"
2602	2	F. E. Jones	Young Woman's Cr.	2	5	4	1	7	500	30	
2603	3	Ross Lambert	Dry Cr.	.781	2.5	1	1	13.33	200	19	"
2604	1	J. H. Otis	South Birch Cr.	1.5	6	5	1	12	250	320	"
2605	1	J. H. King	Brush Cr.	.75	3.5	3	.66	20	75	120	"
2606	3	Lucy L. Morrison	Spring running into Ditch Cr	2.375	2	1	1	25	200	33	"
2607	3	" " "	West Bridger Cr.	1.25	2.5	1.5	1.5	13.33	250	76	1902
2608	3	" " "	" " "	.583	2.5	1.5	1.5	13.33	200	25	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2609	2	J. A. Young, Wm. H. Robbins and Mrs. E. Elder	Billy Cr.	.5	4	2	1	10.56	$ 500	98.5	1901
2610	4	Chas. Ball	Cottonwood Cr.	1.25	5	3	1	6	200	60	"
2611	1	Robt. Williams	Willow Cr.	.5	5	3	1	8	100	16	1900
2612	4	J. W. Byrne	Hog Back Springs	.56				1	250	1	1901
2613	2	Mary C. Vest	Spring, Sec 13, T. 51, R. 63	.34					250		"
2614	3	J. P. Parshall	No Wood River	2	10	8	1.5	3	1,500	312	1902
2615	2	W. H. Robbins and O. E. Elder	Spring Cr.		4	2	1	10.56	300	51.5	1901
2616	4	Jas. H. Claunch	Cottonwood Cr.	1	4	3	1	6	200	135	"
2617	3	J. W. Chapman	Pat O'Hara Cr.	2.25	6	4	1	10	700	122	1900
2618	1	Frances G. McCrossin	Sawmill Canon Cr.	6	5	3	1	30	200	26	1901
2619	1	Mary Wood	Wood Cr.	.25	4	2	1	16	50	9	"
2620	1	Wm. B. Wood	" "	.3	4	2	1	16	100	57	"
2621	1	Mary Wood	" "	.25	4	2	1	16	75	18	"
2622	1	" "	" "	.2	4	2	1	16	26	100	"
2623	2	Mrs. B. Connelly	Box Elder Cr.	1.5	6	4	1	5.28	300	38.7	"
2624	3	David Davis	Bad Water Cr.		4	2.5	1.5	6.66	350	32	"
2625	3	Colin Campbell	Lysite Cr.	1.875	3.6	2	1	13.5	300	103	1900
2626	1	A. J. Cunningham	Salt Cr.	.5	3.5	2	1	12	75	41	"
2627	1	" "	" "	.5	3.5	2	1	12	75	34	"
2628	1	Chas. K. Bucknam	Middle Casper Cr.		3.5	2	1	10	150	56	"

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2629	4	J. H. and C. Anderson	LaBarge Cr.		8	6	1.5	4	$ 500	345	1901
2630	3	J. W. Chapman	Pat O'Hara Cr.	1.25	5	4	1	6	300	40	"
2631	3	" "	Blame Cr.	.5	4	3	1	8	100	35	"
2632	3	Geo. Wise	Franc's Fork Cr.	1.5	7	5	1	5.25	150	191	"
2633	4	John Emery	North Twin Cr.	.5					50	40	"
2634	1	Mary A. Thornton	Foote Cr.	3	6	3.5	1.5	3	800	500	
2635	3	J. A. Barker	Bridger Cr.	.61	3.6	2	2.5	6.33	200	29	"
2636	1	Jane Wagoner	Cedar Cr.	.75	2	2	1	100	25	120	"
2637	4	E. W. L. Green, John Clifton	West branch Sheep Cr.	4.5	4	3	1.5	.56	350	800	1902
2638	1	O. S. and L. H. Marshall	Sheep Cr.	13	10	8	2.5	4.5	4,000	9,258	1903
2639	4	J. C. Anderson	Gros Ventre River	1.75	10	8	1	10.56	300	200	1901
2640	1	Willis Rogge	Dry Laramie Cr.	1.5	5	3	1	5	100	70	"
2641	1	D. Johnson	Springs, Sec. 29, T. 21, R. 60 West								1902
2642	1	David Johnson, Wm. Johnson	Springs, Sec. 8, T. 21, R. 60								1900
2643	1	John Grieve	Cottonwood Cr.	.5	3	2	1	6	100	32	1901
2644	4	Joseph M. Boulter	Muddy Cr.	1.5	4	3	1	34	400	346	1902
2645	3	Laban R. Hillberry	Grass Cr.	6	14	12	2	4	2,500	833	"
2646	1	T. J. Rutledge	Muddy Cr.	1.795	5	3	1	10.56	300	40	1901
2647	2	John L. Olson	Pass Cr.	.75	3	1.5	1	16	100	24	1900
2648	1	Sherman Lute	Cedar Cr.	.5	1.5	1	.33	12	150	30	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade Feet per Mile			
					Top	Bot'm					
2649	2	J. C. Gupton	Springs, Sec. 1, Tp. 53, R. 73 W.	.625		.25	.167	30	$ 200		1901
2650	1	Mary McFarland	South Middle Spring Cr.	.75	3	2	1	15	50	160	1900
2651	4	Vilate White	North Spring Cr.	.25	3	2.5	1	15	50	160	1902
2652	3	N. H. Gable	Grass Cr.	.937	4	3	1	18	200	62.5	1901
2653	4	Jane Wagoner	Cedar Cr.	.333	1	1	.5	40	10	20	1900
2654	1	Martin Schwab	Salt River	2	14	12	3	7	250	440	"
2655	4	Andrew J. Kennaday	North Fork Cedar Cr.	.75	4.5	3	2		200	150	1902
2656	4	Oscar S. Reddick	Horse Cr.	2.25	8	5	1.5	5.28	1,000	900	
2657	1	Jas. S. Alexander	Cottonwood Cr.	.375	6	4	1	10	150	90	1901
2658	1	Frank Deuel	" "	93 rds.	1.5	1	1.25	5.28	125	7.5	"
2659	1	" "	" "	90 rds.	1.5	1	1.25	5.28	100	9	"
2660	1	" "	" "	85 rds.	1.5	1	1.25	5.28	54	5	"
2661	1	Dwight P. Smith	Little Laramie	1.5	4	3	1.5	5	300	117	"
2662	1	Neal Matheson	Bar-M Cr.	.75	4	3	1	7	100	62	"
2663	1	Nick Lundquist	Sand Cr.	8.75	4	3	1	5	300	132	"
2664	1	Ira S. Bunn	Cottonwood Cr.	1	3	2	1	6	200	175	"
2665	1	Rodney W. Darst	Dry Laramie Cr.	1	5	3	1	10	50	130	1900
2666	4	Frank Sebastian	Gros Ventre River	4	12	10	1.5	5.28	1,000	710	1903
2667	4	Ed. Ramey	" " "	4	11	8.5	1.33	5.28	900	295	1905
2668	4	" "	" " "	1.5	6	4	1.5	10.56	150	160	1902
2669	1	Uree D. Horn	Deadwood Cr.	.75	3	2.5	.66	14	100	15	1900

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2670	1	Levi Simmons	Big Twin Cr.	1	6	4	2.5	66	$ 300	580	1902
2671	3	Wm. H. Gable	Grass Cr.	1.375	4	3	1	13.5	250	54 5	1901
2672	3	" " "	Desney Cr.	1.312	4	3	1	16.66	250	25	"
2673	4	Curtis Moore	West Bridger Cr.	1.25	4	3	1	25	300	42	"
2674	3	T. B. Hallett and N. H. Brown.	Sawmill Cr.	4.5	8	8	1.5	8	5,000	1,600	1903
2675	4	Isaiah Butterworth.	Moultree Spring	2	6	5	1.5	7	200	440	1902
2676	1	Harry S. Yount.	Halleck Cr.	.25	2.5	1.5	1	15	150	30	1900
2677	3	John S. Day	Bridger Cr.	4.375	8	6	2	.75	1,500	376.5	1902
2678	2	Oliver N. Amsworth.	North Redwater	1	3	2.5	1	5.5	100	25	1901
2679	4	M. Robinson.	Big Cow Cr.	.75	5	4	1	6.66	175	160	"
2680	3	D. J. Jones.	East Sage Hen.	.58	5	2	1	5.28	75	27	"
2681	3	Dennis Crowley.	Tough Cr	1.5	3.5	2.5	1.5	6.66	300	47.5	"
2682	4	Albiather Jones.	Springs, Sec. 4, Tp. 12, R. 105 W.	1	2	1.5	1	125	300	160	1903
2683	4	" "	Springs, Sec. 3, Tp. 12, R. 105 W.	.689	2	1.5	1	125	300	100	"
2684	3	A. A. Smith.	Elk and Deer Reservoir	1.75	5	3	1	10	150	177	1901
2685	3	Fay Finland.	White Cr.	2	5	4	1	6	300	113	"
2686	4	Wm. R. Malonek	Silver Cr.	.954	5	4.5	1	13.5	250	160	1902
2687	1	Edward Held	Cottonwood Cr.	1	30	24	9	1.33	200	60	1901
2688	1	J. R. Karman	Bolton Cr.	.625	5	3	1	11	150	85	"
2689	3	Wm. H. Gable	Jones Cr.	3.625	4	3.5	2	6.66	600	223	1902

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2690	3	Wm. H. Gable	Jones Cr.	.75	3	2.5	1	13.33	$ 200	19	1901
2691	3	Joseph Dolis	Bridger Cr.	1.125	3.5	3	1	5	390	86	"
2692	3	J. B. VanOrsdale	Trapper Cr.	.75	5	3	1	5.25	100	40	"
2693	1	Wm. F. Gorgues	Fish Cr.	1	6	4	1	7	300	64	"
2694	4	Benj. Broadbent	Spring Cr., Sec. 12, T. 34 N., R. 119 W.	1	3	2	1	15	80	160	"
2695	1	Hark C. Paulson	Snow Gulch, Sec. 6, Tp. 18, R. 81 W.	.5	2	2	1.33		100	75	"
2696	1	" " "	Fox Cr.	.5	2	2	1.33		100	70	"
2697	2	A. Webster	Gulch, Sec. 14, T. 53, R. 61	.687	4	3		8	300	20	"
2698	4	J. L. Elder	South Beaver Cr.	.75	5	3	1	8	100	220	"
2699	4	Chas. O. Elder	" " "	2.5	6	4	1	8	400	565	1902
2700	4	Fred A. Ballon	Duck Cr.	2.25	10	8	1	8	500	315	"
2701	3	John Clark	Cottonwood Cr.	1.5	3.5	3	1.66	15	300	75	1901
2702	3	Big Horn Ditch Co.	Big Horn River	22	22	10	6	2	40,000	17,000	1905
2703	2	Philip Hamm	Reservoir, Sec. 25, Tp. 56, Range 84	1.25	5	2.5	1.5	7	300	15	1900
2704	2	" "	Reservoir, Sec. 25, Tp. 56, Range 84	1	5	2.5	2.5	7	100	10	1901
2705	2	Leuora J. Draper	Sundance Cr.	.189	.66	.5	.08	100	150	3	1900
2706	2	Isaac W. Blake	Sand Cr.	.568	2	1.5	1	60	300	50	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2707	1	J. P. Ibson	Spring, Sec. 15, T. 29, R. 100 W.		.167			8.8	$ 400		1901
2708	1	D. E. Thompson	Rock Cr.		3	3	1.66	10	2,525		"
2709	3	Chas. H. Eads	Sulphur Springs		3.5	2.5	2	13.5	300	21	"
2710	2	Edw. Towns	Ash Cr.	1	3	2	1.5	15	500	150	1902
2711	2	" "	" "	1	3	2	1.5	15	400	100	"
2712	4	S. L. Adams	Spring Cr.	.75	5	4	1	7	150	80	"
2713	1	Donald McPhail	Spring, Sec. 7, T. 17, R. 84		4	2	1.5	3	100	180	1901
2714	3	Marion Williams	Carter Cr.						200	85	1903
2715	3	H. W. Darrah	" "	3	7	4	1.5	5.28	350	230	"
2716	1	Thos. Cooper	Sand Springs	1.75	7	2.5	1.5	4	300	33	1902
2717	2	Oliver Kerr	Kerr Reservoir, Sec. 22, Tp. 56, Range 85	1.125	4.5	2.5	1	6	75	50	"
2718	1	Jas. Dolan	Spring, Sec 23, T. 13, R. 61	.033	4	24			50		1901
2719	1	Carl Piper	Spring, Sec. 26, Tp. 15, R. 73 W.	.081	.66	.66	.66	6	25	9	"
2720	1	" "	Spring Sec. 26, Tp. 15, R. 73 W.	.077	.66	.66	.5		25	6	1900
2721	4	John Cherry	Gros Ventre River	2.5	7	5	1	10.56	250	160	1901
2722	3	Thomas N. Smith	Badwater Cr.	1.25	3	2	1	4	200	70	"
2723	3	Horace F. Tyrrell	" "	1.25	4	3	1	4	600	145	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2724	3	Frank Pfaff	Powder River	2.067		2	1	6	$ 480	111	1900
2725	1	E. M. Hicks	Spring Cr.	1.5	4	3	1	5	200	160	1901
2726	2	Augustus Fraker	Powder River	1.225	4	3	1	6.66	300	47	"
2727	4	Ira J. Ames	Steward Cr.	2.5	4	3	1	30	100	160	"
2728	4	T. W. Lloyd	Little Cow Cr.	1.25	5	4	1	6.66	300	150	1902
2729	1	J. P. Newell et al	North Laramie River	2.5	7	5	1.25	4	500	308	1901
2730	1	Thomas Bretton	Deadhead Cr.	.625	5	2	1.5	10	100	25	"
2731	1	Peter Hansen	Cottonwood Cr.	1.5	4	3	1	7	200	86	"
2732	4	F. K. Cranney	Salt River	1.25	8	6	1	10	50	85	1902
2733	4	F. P. Hancey	Spring Cr.	.25	2.5	2	1	18	40	80	"
2734	2	D. E. Goddard	Old Woman Cr.	1.375	3	2	1.5	6	250	10	"
2735	4	Julia B. Nichols	South Cottonwood	1	6	5	1	8	300	255	"
2736	1	L. L. Fulton	Box Elder Cr.	.25	4		.83	5	150	38	1901
2737	1	Chas. A. Fauver	Little Medicine Bow	1	3	2	.83	6	300	100	1900
2738	1	" " "	" " "	1	3	2	.83	6	300	60	"
2739	3	Wm. F. Cody	Rock Cr.	.5	3	2	1	5.28	100	40	1901
2740	2	Edgar Gossett	Crazy Woman Cr.	2.5	1.5	.5	1	10	500	70	"
2741	1	Grand Encampment Town Co.	Grand Encampment Cr.	2.49	5	2	3	21.17	22,700		1901
2742	2	Leroy Keys	Washta Spring	.25	1	1	.5	.3	200	5	"
2743	1	Jas. Cerragher	Bear Cr.	1.25	3	2	1	8	50	8	"
2744	1	Alma J. Ferguson	Springs, Sec. 3, Tp. 16, R. 73 W.	.912	3	2	1	4	225	60	1900

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2745	4	J. H. Nibarger	Smith's Fork Cr	.016	4	3	1	10	$ 20	160	1901
2746	3	L. G. Wildes et al	Grey Bull River	1.5	3	1.5	1.5	10	250		"
2747	2	John Storrie	Hat Cr	.63	6	4	1	5.8	75	64	
2748	2	W. J. Van Ness et al	Sheep Cr	4.5	5	3	1	10.56	1,500	880	1902
2749	2	Wm. J. Brock	Dry Cr	.05	3	3	1	10	200	65	"
2750	2	W. H. Wilkerson	Tetley Springs	.25	2	1	.5	8	50	10	1901
2751	2	Jacob Mill	Big Lightning Cr	2.5	3	2	2	4	500	70	"
2752	2	Ella Godfry	Dry Cr	.062					50	1	"
2753	4	C. H. Fredell et al	South Cottonwood Cr	3.5	8	6	1.5	8	600	1,345	1902
2754	1	O. G. Johnson	South Fork Powder Cr	1.25	4	2	3	7	150	10	"
2755	1	" "	Kidd Spring Cr	.75	4	3	1	7	100	20	1901
2756	2	Robt. C. Taylor	Taylor Springs	.75	2	1	.5	12	150	55	"
2757	4	A. T. McLaughlin	Limestone Spring Cr	1.75		3	1	6	150	280	1900
2758	4	Robt. H. Hodge	Stewart Cr	1	4	3	2	15	200	80	1901
2759	4	Frank Bail	Horse Cr	.375	6	4	1	5.28	200	290	"
2760	2	J. G. Sheldon	Sheldon Cr	1.5	4	3	1.5	60	300	80	1902
2761	2	Sophie Huntington	Amsden Cr	.094	4	2	1	32	200	70	1901
2762	1	Robt. Grieve	Grieve Cr	1.25	4	3	1	7	150	42	1902
2763	3	Jos. Allemand	Otter Cr	.75	3	2	1	20	150	45	"
2764	3	Hester Allemand	" "	1.75	3	2	1	15	250	68	"
2765	2	Colorado Colony Ditch Co	Cross Cr		6	6	2		2,000	7,160	"
2766	1	Chas. Ander et al	Ledge Cr	2	4	3	1	7	500	182	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2767	1	W. H. Bond	Willow Cr.	.217	4	3	1	10	$ 200		1901
2768	2	Geo. W. Moore	Powder River	8.15	6	5	1.5	6.66	2,000	350	1903
2769	1	Robt. Z. McCoy	Battle Cr.	.75	.5	3	1	26.4	600	160	1902
2770	2	Chas. Srubbs	Sheep Cr.	1.375	3	2	.66	12	150	70	1901
2771	1	Lewis J. Woods	Rooster Cr.	1	4	3	1	7	150	46	1902
2772	1	Claude Stevens	Laramie River	.75	5	3	1	5	75	45	1901
2773	1	John Miller	Wallace Cr.	1.25	4	3	1	7	1,300	38	1902
2774	1	Mary A. Thornton	Foote Cr.	3	6	3.5	1.5	13	800	500	1901
2775	4	Martin Schwab	Smith Cr.	1.25	5	3	3	10	100	65	"
2776	1	Louis J. Bush	Big Laramie River	12.3	15	12	2	2	4,000	2,737	1902
2777	1	Jas. B. Grieve	Cabin Cr.	1.5	4	3	1	6	1,000	73	"
2778	1	Wm. Wurl	Harney Cr.	.5	1.5	1	.5	20		17	1901
2779	1	" "	Harney Cr.	.5	1.5	.5	1	20		13	"
2780	4	T. P. Daniel et al.	Green River	2	8	6	1.5	4	600	560	"
2781	1	Ida M. Sellars	Spring Gulch	.5	2	2	1	5	60	35	1901
2782	1	" " "	Antelope Cr.	.133	1	1	1	5	40	10	"
2783	1	Richard Weaklen	North Elkhorn Cr.	.875	5	4	1	3	125	30	"
2784	1	" "	" " "	.625	4	3	1	3	100	7	"
2785	1	Alma Grieve	Poison Spider Cr.	1.25	4	3	1	7	600	58	1902
2786	1	U. P. R. R. Co.	Spring Cr.	2.42					17,000		
2787	1	Whitehouse & Palmer	" "	.666					100	280	1901
2788	1	" " "	" "	1	4	3	1	10	150	160	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2789	1	Colin Beaton	Greasewood Draw	.75	6	4	1	5.28	$ 100	100	1901
2790	1	F. P. Meredith	Meredith Cr	1.5	5	3	1	8	75	25	"
2791	4	Robt. L. Osborn	Goodwater Cr	1.75	2	1.5	1	340	450	130	1902
2792	4	Placer Cyanide Co	North Beaver Cr	1.75	4.5	3.5	1	35	500	160	"
2793	3	D. E. Thompson	Big Popo Agie River						40,000		"
2794	1	L. L. Giessler	Willow Cr	1.75	5	3	1	6.66	200	125	1901
2795	1	Jos. M. Trout	Wallace Cr	1.25	4	3	1	7	150	58	1902
2796	1	" " "	" "	.75	4	3	1	7	150	23	"
2797	3	Alonso Ray	Kirby Cr	2.5	7	5	1	6	500	295	1903
2798	4	C. A. Thurman	Willow Cr	20	3	2	1	10	20	80	1901
2799	2	B. F. Champion	Mountain Springs	.166	2	1	.5	10	75	6	"
2800	4	R. S. Vickery et al	South Horse Cr	4	6	3	1.5	8	150	415	1902
2801	4	Thos. W. White	South Middle Spring Cr	.071	5	4	2	15	300		1903
2802	2	B. F. Parker	Six Mile Cr	2	5	3	1	10.56	400	76.9	1902
2803	1	Kurtz-Chatterton Copper Mining Co.	Miner Cr		4	3	1	25	3,000		1901
2804	1	N. A. Blaker	Tabor Springs	.125					300		"
2805	3	F. W. Morgan	Teton Cr	2	16	14	4	6	1,500	2,000	1902
2806	3	C. R. Hoffman	Rattlesnake Cr	1	4	3	1	5.28	100	100	1901
2807	4	Eugene Alexander	West Fork New Fork	.25	4	3	1	10.56	80	50	"
2808	1	J. W. Woodbury	Snake River	7.5	8	6	1.5	3	2,500	600	1902
2809	4	W. E. Enos	Green River	2.5	7	5	1	6.66	400	308	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade Feet per Mile			
					Top	Bot'm					
2810	3	Jos. Burns	Little Popo Agie	1					$ 30,000		1902
2811	4	Wm. F. Hill	Crow Cr	.75	3	1.5	1	64	300	80	"
2812	4	" " "	Wagon Cr	.375	4	3	1	8	200	136	"
2813	4	Zeph Jones	Big Canon Cr	1	5	3	1	75	100	95	1901
2814	1	H. Allen Faulkner	Upper Mud Springs								"
2815	2	G. N. Doyle	Walker Cr	.5	4.5	3	.75	5.28	50	27	"
2816	3	Paul S. Clark	Spring Cr	1.75	3.5	2.5	1	30	175	115	1902
2817	3	C. E. Martin	Rattlesnake Cr	1	3	2	2	12	100	160	1901
2818	3	Jas. Thomson	Spring Cr	.25	2	1.5	.5	20	50	6	"
2819	3	" "	Short Cr	1.5	3	2	1	20	50	33	"
2820	1	W. A. Lester et al	Little Cottonwood Cr	1	3	2	1	5	250	325	"
2821	3	Wm. H. Woods	Bennett Cr	2.5	10	7	1	8	1,200	400	1902
2822	3	Wm. Lambe	Rawhide Cr	.5	3	2	1	20	100	26	"
2823	3	J. M. Smith	Little Rocky Cr	2.75	8	6	1	10	500	650	1901
2824	3	J. J. Kellum	Paint Cr	1.75	6	4	1	8	200	114	"
2825	3	John Fry	Bennett Cr	1.5	8	6	1	10	100	160	"
2826	3	Samuel Cortsen	Paint Cr	2.75	3	2	1	10	150	100	"
2827	4	Archy Beaton et al	New Myers Cr	1	6	3	1	10	150	67	1902
2828	3	W. J. Ashley	Green River	4.5	6	4	1.5	4	600	565	1903
2829	3	M. P. Palmer et al	Spring Cr	1.5	7	4	1	10	200	61	1902
2830	3	Frank Moline	Deep Cr	1.625	3	3	1	16	200	83	"
2831	3	F. W. Decker	Bennett Cr	1.25	6	3	1.5	10	200	320	1901

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2832	3	J. R. Painter	Sunlight Cr.	6.8	5.5	4	1.5	9.5	$ 800	185	1901
2833	4	John Miller	Granite Cr.	1.25	4	3	1	30	100	160	"
2834	1	Rodney W. Darst	Dry Laramie River	1.5	5	3	1	10	150	105	"
2835	1	" " "	" " "	.75	4	3	1	12	100	35	"
2836	2	J. S. Young et al.	Poison Cr.	3	6	4	1	5.28	600	193	1902
2837	2	J. A. Young	" "	.75	5	3	1	5.28	500	60	1901
2838	2	M. C. Young	Doyle Cr.	2.5	6	4	.5	10.56	1,500	397	1903
2839	4	Frank Crow	South Cottonwood Cr.	.5	4	3	1	8	250	137	1901
2840	2	A. W. Phillips	Sand Cr.	1.5	4	3	1	5	500	60	1903
2841	4	C. F. Roberson	Ham's Fork Cr.	6	10	8	1	4	1,500	700	1904
2842	1	Kirk Dyer	West Cameron Cr.	.75	3	2	1	6.66	200	15	1901
2843	1	" "	" " "	.375	3	2	1	1.16	125	16	"
2844	1	Mrs. Cora Dyer	West Cr.	.75	3	2	1	6.66	250	45	"
2845	1	" " "	West Cr.	.5	2.5	2	.833	6.66	125	25	"
2846	4	John Sims	Bear Cr.	.924	4	3	1.5	5	200	240	1902
2847	3	S. W. Aldrich	Hard Pan Cr.	1.5	5	3	1	10.56	250	200	1901
2848	2	Thos. W. Wroot	Coral Cr.	.5	3	2	.66	12	75	16	1902
2849	2	" " "	" "	.475	3	2	.66	12	75	11	"
2850	3	Morgan Thomas	North Rawhide Cr.	6	2	2	2	50	500	120	1901
2851	4	John Cherry	Black Rock Cr.	2.33	5	4	2		350	320	1902
2852	4	R. W. Taluradge	Grade Canyon	2.75	3	2	1	7	350	160	1903
2853	2	J. L. Condit	Beaver Cr.	2.85	8	6	1.5	6.66	1,200	220	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2854	2	Ike Jay	Allman Gulch	.437	1	1	.5	200	$ 100	25	1902
2855	1	L. L. Laughlin	Bar-M Cr.	1	4	3	1	10	200	105	"
2856	1	" "	Newell Springs	.75	3	2	1	8	100	100	1901
2857	4	J. A. Williams	Spring Cr.	1	4	3	1	8	150	160	"
2858	1	L. L. Laughlin	Bar-M Cr.	1	4	3	1	6	200	94	"
2859	2	W. H. Minter	Iron Cr.	1	4	3	1	5.25	150	110	1902
2860	1	U. P. Water Co.	North Platte River	16							1905
2861	4	E. McNish	Duck Cr.	2	4	3	1	5.28	450	115	1903
2862	2	J. T. McDowell	North Fork Pass Cr.	.795	3	2	.75	6	100	50	1902
2863	2	Town of Sundance	Spring, Sec. 23, Tp. 51 N., R. 63 W.	.795					1,500		1901
2864	2	Chas. F. Smith	Deer Cr.	.25	3.5	2	.75	5.28	25	10	"
2865	2	" " "	" "	.5	4.5	3	.75	5.28	35	23	"
2866	2	" " "	" "	.5	4.5	3	.75	5.28	40	29	"
2867	4	J. W. Flemming	Granite Cr.	1	4	3	1	10	150	160	1902
2868	4	A. A. Curtis	Fish Cr.	1.75	7	6	1	8.5	300	200	1901
2869	1	Peter Matzen	Deer Cr.	1.25	4	3	1	5	200	37	"
2870	1	Julius Prahaska	Elkhorn Cr.	.5	4	2.5	.75	10	60	11.5	"
2871	1	" "	" "	.5	5	3	1	10	100	20	"
2872	3	Ora E. Snyder	Spring, Sec. 4, T. 40 N., R. 90 W.	1.3	2.5	2	1	20	100	8	"
2873	4	S. A. Nelson	Lost Cr.	1.25	3	2	1.5	15	80	160	1902

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2874	2	Wm. T. Dolan	LaPrele Cr	.25	5	3	1	5.28	$ 100	40	1901
2875	3	Henry R. Moss	Meeteetse Cr	.696	4	3	1	20	100	55	"
2876	1	Thos. Kelley	Springs, Sec. 7, Tp. 13, R. 60 W.	.25	2	1	1	10	100	20	"
2877	2	Jacob Mill	Big Lightning Cr	2	5	4	1.5	5.28	500	101.5	1902
2878	1	W. D. Brydon	East Cottonwood Cr	.75	4	3	1	5	150	43	1901
2879	1	Lettie M. Misters	Fields Cr	8.5	4	3	1	5	150	43	"
2880	3	Mina Moss	Short Cr	1	3	2.5	1	12	200	114	1902
2881	3	Vincent Vanoni	Ten Sleep Cr	2.75	8	6	1	7	400	200	1905
2882	3	Chas. Stonegridge	Whit Cr	1.25	3.5	2.5	.5	10.56	150	95	1902
2883	3	" "	Rand Cr		3.5	2.5	.5	5.28	50	40	1901
2884	4	Hans Hemmert	Salt River	1.5	8	6	2	7	800	560	1900
2885	2	J. H. Kennedy	Deadwood Cr	1.5	5	4	1	5	200	50	1903
2886	3	Horace Rate	Bad Water Cr	2	7.5	4	2	6.5	600	181	1901
2887	3	J. P. Echard	Gulch, Sec. 16, T. 50, R. 102	3	8	6	1	10	200	202	"
2888	3	Farquhar Gillies	Grass Cr	4.5	8	6	1	8.8	350	420	1903
2889	3	Robt. Echard	Swamp Cr	1.75	4	3	1		100	61	1901
2890	3	J. P. Echard	Hoodoo Cr	1.25	5	3	1	20	150	48	"
2891	4	Jacob Middaugh	Sage Cr	3.25	5	3	1	20	50	80	"
2892	1	H. C. Bigelow	VanTassell Lake	20	12	9	2	60	22,999	25,000	1906
2893	1	Rollin A. Clark	Bates Cr	2.5	10	8	1	6.5	150	275	1903

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2894	1	Michael O'Rourke	Muddy Cr.	.75	3	2	1	10	$ 200	60	1901
2895	1	Chas. Neitchen	Little Laramie River	2	6	4	1	5	700	283	1902
2896	4	Oscar Morganson	Bear Cr.	.75	4	2	1	8	100	80	"
2897	3	Susie A. Allen	Paint Cr.	2	8	6	1	4	500	130	"
2898	4	Mary Belknap	West Fork New Fork	.75	7	4	1	4	350	320	1903
2899	4	E. M. Belknap	" " " "	.75	5	3	1	4	150	150	1902
2900	4	J. W. Flemming	Phelps Lake	.25	5	4	1		500	320	1903
2901	4	Edward Flemming	Snake Cr.	1.5	5	4	1		500	320	"
2902	1	Eugene McCarthy	Casper Cr.	6	6	4	1	4	200	45	1902
2903	2	Carl Bayer	Beaver Cr.	.5	5	3	1	8	150	28	"
2904	2	" "	" "	.6	5	3	1	8	200	42	"
2905	1	Peter Nicolaysen	Cole Cr.	.5	3.5	2.25	1.5	5	140	28	1901
2906	1	M. W. Dillon	Battle Cr.	.288	5	3	1	52.8	250		1902
2907	2	John Winingar	Horse Cr.	.75	3	1.33	.66	10	80	32	1901
2908	4	Chas. F. Roberson	Fontenelle Cr	2	6	4	1.5	4	350	218.35	1903
2909	1	G. E. Millard	Badwater Cr.	1	3	2	1	10	200	40	1901
2910	1	" "	" "	1	3	2	1	11	200	30	"
2911	2	Richard Richter	Crazy Woman Cr.	2	4	2	1	10.5	1,000	165	1902
2912	2	Andrew Jackson	Little LaPrele Cr.	2.5	8	6	1.5	5	800	292	"
2913	1	W. A. Conley	Beaver Cr.	.714	4	3	1	5	200	31	"
2914	1	H. Ralph Hall	Lee Springs Cr.	1.5	3	2	1	5	200	31	"
2915	1	W. J. Garlock	George Cr.	.25	2	1	1	6	100	10	1901

PERMITS TO APPROPIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2916	1	W. J. Garlock	Antelope Cr.	.625	3	2	1	7	$ 150	74	1902
2917	1	" "	Fallass Draw	.25	2	1	1	7	75	40	"
2918	1	" "	Davidson Cr.	.25	3	2	1	5	100	12	"
2919	1	" "	Prager Cr.	.75	4	3	1	5	200	66	"
2920	4	J. W. Schofield	Trail Cr.	.75	3	2	1	8	250	40	"
2921	3	Newton Land Co	Sage Cr.	3.5	17	12	2.5	5	5,000	1,520	1903
2922	4	Burleigh Binning	Lake Cr.	.75	4	3	1	62	200	150	1902
2923	2	G. I. Hobbs	Rawhide Cr.	1.25	8	6	1.5	8	750	28	1903
2924	2	John Winangar	Horse Cr.	.75	2	16	.66	10	80	35	1901
2925	1	Kate McFarlane	Davidson Cr.	1	4	3	1	5	300	100	1902
2926	2	J. F. Murphy	Elkhorn Cr.	.875	6	4	1	7	150	70	1901
2927	1	W. F. Seabolt	Davidson Cr.	.5	3	2	1	10	75	11	"
2928	1	" "	" "	.375	3	2	1	6	80	14	1902
2929	4	Roy Anderson	Phillips Cr.	1.75	4	3	1	15	200	280	1903
2930	3	Herm Dyer	Grey Bull River	2.5	4	3	1	5.28	400	107	1902
2931	1	A. J. Rosander	Cottonwood Cr.	.25	3	3	6	5	100	20	1901
2932	4	Thomas Edwards	Trout Cr.	1.75	2	8	1	14	300	200	1902
2933	1	F. F. Johnson	Sage Cr.	1.5	4	3	1	7	350	149	"
2934	4	W. L. Price	Gros Ventre River	3	10	8	1.5	5.28	400	320	1903
2935	1	Leslie E. Snow	Spring Cr.	.5	1.5	1	.5	8	50	20	1901
2936	1	" " "	" "	.25	1.5	1	.5	8	50	9	"
2937	1	" " "	" "	.5	1.5	1	.5	8	50	27	"

PERMITS TO APPROPRIATE WATER—*Concluded.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
2938	2	Albert Urban	La Prele Cr	1.5	5	4	1	6	$ 300	71.8	1902
2939	2	Kenneth McDonald	Willow Cr	1	5	3	1	8	200	62	1901
2940	2	Henry H. Bartshe	Box Elder Cr	1.5	4.5	3.5	1.16	2	250	40	1902
2941	1	William H. Vaughn	Scott Spring								1901
2942	4	P. J. Delaney	Green River	2.5	8	5	1.5	.8	1,000	155	1902
2943	1	D. R. Whitaker	Little Bear								1903
2944	3	J. Donovan	Spring Cr	.7	5	3	1	8	200	29	1902

The Permits described on the preceding pages are those issued between November 30th, 1898, and November 30th, 1900.

APPLICATIONS FOR ENLARGEMENT

From Nov. 30th, 1898, to Nov. 30th, 1900.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date of Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
388	1	A. Rutherford	North Platte River	11.375	15	15	2.5	2	$ 4,000	1,568	1902
389	4	Chas. Wilkes	Salt River	5	20	18	3	10	70		1899
390	4	" "	Cottonwood Cr	3.5	12	11	2	10		95	"
391	4	Mary I. Hughes	North Piney Cr	2.5	6	5	1	52	100	320	1900
392	4	Chas. Peterson	Pine Cr.	.5	4	3	2.5	6.66	150	275	"
393	1	Jane Salmon	Sweetwater River	1	9	7	1	4	200		1901
394	1	A. and J. Salmon	" "	3.5	10	8	1	4	750	135	1900
395	3	C. A. Dodge	Grey Bull River	1.788	8	6	1	6	500	264	1899
396	3	C. F. Rathbone	Wilson River	3.25	8	6	2	10	500	337	1901
397	1	A. J. Bothwell	Sweetwater River	2.64	18	15	3	2.64	1,000	439	1900
398	3	Mary J. Corbett	Grey Bull River	11	12	9	1.5	6	600	109	1901
399	1	Mowry Bros. & Co	South Spring Cr	2.5	8	6	1.5	5.28	1,000	320	1902
400	3	P. T. Peralta	Big Popo Agie River	8	4	3	2	9		130	1899
401	2	Souther & Palmer	Piney Cr	2.5	6	4	1	4.7	200	47	1900
402	4	K. K. Hill	Pine Cr	1.5	8	6	1.5	8	400	330	1901
403	1	A. W. Phillips	LaBonte Cr.	6.5	14	8	2	2.5	2,000	855.5	"
404	3	A. L. Coleman	Canon Cr	.75	5	4	1	8	700	85	1899
405	3	J. W. Strayer	Beaver Cr	7.5	10	8	2	3.65			1900

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade Feet per Mile			
					Top	Bot'm					
406	2	E. R. Dinwiddie	Little Tongue River	1.75	5	3	1	10	$ 15	15	1900
407	1	Wm. McCrossin	Little Box Elder Cr	.75	6	4	1		150	28	"
408	4	M. T. Wright	Smith's Fork Cr	2.25	14	12	2	15	150	78	"
409	2	J. L. Baird	North Fork Beaver Cr	3.5	3	2	1	8	100	60	1902
410	3	Cicero Avant	Grey Bull River	4.66	11	6	2.5	4		80	1901
411	3	L. L. Smith	" " "	3.5	7.5	6.5	1	7	200	50	"
412	2	J. L. Mitchell	Mitchell Cr	.5	3	2	1	6.5	500	60	"
413	4	Martha E. Bess	LaBarge Cr	.5	5	4	1	5.28	150	117	"
414	4	A. A. Steed	" "	1.75	13	11	1.5	6	150		1900
415	1	W. A. Blackmore	Muddy Cr	4.25	4	3.8	.66	.8	20	34	1901
416	3	Wm. A. Stevenson	Grey Bull River	3	15	9	2	7	600	109	"
417	2	E. R. Dinwiddie	Little Tongue River	6	6	3	1.5	.5	300	150	1900
418	3	G. B. Pardee	Owl Cr	2.5	10	8	1	6.5	300	232	"
419	4	Robert Park	Cottonwood Cr	4	8	6	1.5	11.5	350	195	1901
420	4	Wm. G. Park	" "	2	5	4	2	20	200	60	1900
421	3	H. M. Simpson	Clark's Fork	3	8	6	1.5	5	2,000	992	"
422	3	Farmers' Prot. Association	Shoshone River	10	26	20	3	2	4,000	2,500	1903
423	4	Andrew Peterson	Brodshaw Cr	1	2	1.5	1	10	50	160	1900
424	4	M. J. Wright	West Fork of New Fork	1.5	9	7	2	6	350	335	1901
425	4	Nettie B. Hoff	" " " "	3.25	9	7	1.5	15	300	596	"
426	4	J. W. Carpenter	Nowood Cr	4	10	8	1	5	150	37	"
427	3	Donald McPhail	Jack Cr	.5	5.5	4.5	1.25	7		320	1900

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
428	4	G. W. Nibarger	Smith's Fork Cr.	2.2	8	7	1	40	$ 25	160	1901
429	1	E. A. Thayer	Hunton Cr.	.5	6	4	2	6	200	164	"
430	4	Elizabeth Lowder	Swift Cr.	.75	3	2.5	1.5	15	100	80	1899
431	1	Clara W. Larson	Medicine Bow River	3	6	4	2	4	100	120	1900
432	1	Rollin A. Clark	Bates. Cr.	2.25	12	9	1.5	6.5	500	170	"
433	1	Mary Gorden	Horse Shoe Cr.	1	6	4	1	5	300	85	"
434	4	Elbert Allen	Cottonwood Cr.	4.5	6	4	2	27	500	289	1901
435	3	George Glaze	Grey Bull River	3.75	7	5	1	8	250	105	1900
436	2	John Baugh	Arch Cr.	1.5	6	4	1	5.5	120	220	1901
437	4	T. B. Schabe	North Piney Cr.	2	8	6	1.5	25	250	115	1900
438	4	F. Kingston	Cottonwood Cr.	1.5	8	6	2	10	150	175	1901
439	4	Carl Anderson	Willow Cr.	.375	2	1.5	1	10	50	40	1899
440	1	W. A. Clark	Snake River	10	16	12	3	4	1,000	1,701	1903
441	1	Josephine Higgins	North Platte River	4.5	8	6	1	5	1,500	1,057	1901
442	4	C. A. Johnson	Salt River	3.5	3	2	1.5	10	150	190	1899
443	1	Peter Paulson	Horse Shoe Cr.	.435	3	1	1	10.6	50	35	1900
444	4	Michael Lowham	Mill Cr.	1	3	3	2	8.28	10	65	"
445	2	Colorado Colony Ditch Co.	Cross Cr.	16	17	10	3.5	5.28			"
446	1	John Moran	Elkhorn Cr.	1.022	4	3	1	10	200	90	"
447	1	O. R. Henke	Sybille Cr.	.75	2.5	2	1	7	40	20	"
448	2	John Storrie	Hat Cr.	2	6	3	1	5.28	100	120	"
449	2	" "	" "	1.5	6	3	1	5.28	100	40	"

PERMITS TO APPROPRIATE WATER—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
450	4	James Jensen	Jensen Cr	.5	3	2	1	10	$ 50	15	1900
451	4	R. L. McGavin	Burch Cr	3	4	3	1.5	10	15	160	"
452	4	John Reves	Crow Cr	4.75	3	3	1	20	50	80	"
453	4	Hans J. Olson	East Fork New Fork	2.75	5	4	1	240	300	232	1901
454	4	F. P. Cranney	Cottonwood Cr.	2.5	5	4	2.5	65	200	910	1899
455	1	John Kern	La Bonte Cr	1.25	6	4	1.5	2.5	125	15	1900
456	4	John and J. A. Fluckiger	Willow Cr	2.5	12	10	2.5	18	50	85	"
457	1	Geo. Mitchell	North Laramie River	.227	5	3	1	10.6	50	20	"
458	1	I. C. Platt and J. A. King	Billy Cr	2.5	6	4	1.5	5.28	2,000	1,160	1901
459	4	B. G. Griggs	Middle Piney Cr	1.75	7	6	1.5	50		132	"
460	2	Chas. H. King	Poker Cr	2.093	4	3	1	8.33	500	33	"
461	3	A. Cavendar	Grey Bull River	2.5	10	8	1	5.28	200	128	1900
462	3	Milton D. Howard	Shell Cr	9	14	10	1.5	4	2,000	430	1902
463	3	Henry Becker and Jacob Becker	Deep Cr	6.45	8	5	1.5	10	800	948	"
464	4	T. J. Anderson	LaBarge Cr	.75					100	560	1900
465	2	W. T. Roberts	Clear Cr	.5	5	3.5	1	4	400	40	1901
466	2	G. A. Roberts	" "	.25	5	3.5	1	4	50	40	1900
467	1	F. E. Sterrett	North Fork Brush Cr	5	12	8	2	3.16	400	200	"
468	3	J. W. Daniels	Grey Bull River	2.25	11	8	1	4.5	300	105	"
469	2	I. B. Roberts	Clear Cr	1.25	5	3.5	1	4	600	120	1901
470	1	Minnie Rietz	Big Laramie River	1.25	6	5	1	6	200	105	1900
471	2	Wm. S. Hill	Md. Fork Powder River	4	8	6	1	6	500	80	1901

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade Feet per Mile			
					Top	Bot'm					
472	4	Susan Renshaw	North Piney Cr.	2.5	6	5	2	25	$ 150	90	1901
473	4	Christopher Early	Black's Fork Cr.	1.75					75	55	1900
474	4	Mary P. Kingston	Swift Cr.	4.5	13	11	1.5	20	150	40	1901
475	4	Ella Reardon	South Piney Cr.	2	10	8	1.5	5.28	500	640	1902
476	4	Jennie S. Holden	" " "	1.375	6	4	1	5.28	200	200	1901
477	3	Samuel Osborne	Wood River	.75	3	2	2	10	500	60	1900
478	3	T. E. Brackney	" "	1.5	3	2	2	10	500	50	"
479	3	Elizabeth Waln	Medicine Lodge Cr.	3.006	5	4	1.5	6	250	360	"
480	3	Charles Mills	No Wood River	1.25	5	4	1	6	150	46	"
481	1	Josephine Fletcher	Sweetwater River	3	8	6	1.5	4	300	120	1901
482	3	Otto Franc	Grey Bull River	6	20	12	2			320	1899
483	1	Chas. G. Johnson	Red Cloud Slough	1.5	3	2.5	.66	6	100	175	1900
484	1	" " "	" " "	1.5	3	2.5	.66	6	100	150	"
485	3	J. E. Benion	Wood River	1.5	7	5	1.5	8		135	"
486	1	John Reid	Little Laramie	2.5	4	4	2	5	500	297	"
487	4	Daniel Nash	Black's Fork	1.79	6	5	1	6	200	192	1901
488	3	F. R. Lundie	Grey Bull River	1.5	10	8	1	6.5	100	30	1900
489	1	W. H. Davis	Deer Cr.	.5	5.5	3.5	1.5	8	150	133	"
490	1	" "	" "	.25	5.5	3.5	1.5	8	40	14	"
491	1	Albert Deselm	Little Medicine Cr.	1.25	4	3	1	7	175	110	1901
492	4	Grace A. Snider	Horse Cr.	1.25	10	8	1.5		200	280	"
493	3	J. W. Deane	Wood River	.25	2	1.5	1.5	10	100	20	1900

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
494	3	J. A. Williamson	Grey Bull River	2	6	6	5	6.66	$ 340	340	1901
495	2	Hiram Sturdivant	Piney Cr	.75	5	3.5	1.5	12	200	80	1900
496	4	S. M. Vickrey	South Piney Cr	20	12.5	9	1.5	4	100	36	1901
497	3	Flora Standish	Grey Bull River	3	3	2	1	6	150	35	1900
498	4	G. W. Webster	Middle Piney Cr	1.5	6	4	1		150	160	"
499	3	Wm. M. Harvard	No Wood Cr	1.75	3	2	1	8	200	27	"
500	1	J. A. Kennedy	Bates Cr	1.25	10	8	1.5	5	1,200	160	1901
501	1	W. S. Waln	Horse Shoe Cr	1.5	6			5	200	20	1900
502	3	J. W. Morrow	Grey Bull River	8	10	8	1.5	8.8	100	151	"
503	1	John Reid	Little Laramie	2	4	3.5	1.5	6	75	140	"
504	1	" "	" "	3.5	7	5	2	5	200	153	1901
505	4	J. T. Tryon	Smith's Fork Cr	1.8	2	10	2	8	150	50	"
506	3	E. A. Signor	Beaver Cr	1.5	5	3	1	9	250	100	1900
507	3	C. J. Mecham	Owl Cr	2		5	1	6	200	200	"
508	1	Henry Mudd	Sybille Cr	.75	2	1	1	8	60	41.6	1901
509	4	Ed Rose	Black's Fork River	.333	8	7	1	8	50	120	1900
510	3	B. B. Morton	Ten Sleep Cr	3	9	7	1	3.2	200	210	1901
511	1	Chas. E. Lovell	North Platte River	1	4	3	1	6.63	200	50	"
512	4	Levi E. Merritt	Strawberry Cr	.75	8	7	1.5	8	100	80	1900
513	2	J. V. Duke	Powder River	.75	8	6	1	5.28	200	47	"
514	3	Thos. S. Mills	Cherry Cr	2	8	6	1	8		22	1901
515	3	Milton Benedict	Shoshone River	2.5	4	3	1	8	200	30	1902

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
516	4	W. T. Cranney	Cottonwood Cr	1.75	9	7	2.5	20	$ 50	39	1901
517	3	F. V. Andrews	Sand Cr	.104	3.83	3.83	2.41	6.66	100		"
518	4	John Erekson	Smith's Fork Cr	2.98	12	10	2	8	150	83	"
519	3	Noble & Braggs Sheep Co	No Wood River	2.5	3	2	1	8	300	78	"
520	2	Chas. B. Devoe	Beaver Cr	3.25	8	6	1.5	12	300	206	1902
521	3	Nellie Sliney	Owl Cr	5.5	7	5	2	8	200	160	1901
522	2	A. M. Oglesby	Powder River	2.2	3	2	1	3.33	200	20	"
523	4	Silver & Bensen	Bear River	2	10	7	2	5.28	300	520	"
524	1	W. A. Benecke	Bates Cr	4.5	10	7	1.5	16	300	930	"
525	1	W. C. Harnden	Wagon Hound Cr	.25	7	5	2	8	100	139	"
526	4	K. J. Jomen	East Fork New Fork	2.75	8	5	1.5	10	800	405	1902
527	3	Frank Gapen	Medicine Lodge Cr	.796	3	2.5	1	27	50	70	1901
528	1	L. E. Burnett	Little Medicine	.968	4	3	1	6	50	110	1900
529	1	" "	" "	.812	3	2.5	.87	8	25	48	"
530	3	W. R. Williams	Brokenback Cr	1.25	5	4	1.5	5	150	85	1901
531	1	Geo. I. Lambe	LaPrele Cr	3	6	6	1	5	480	150	1900
532	1	D. D. Wagoner	Cedar Cr	.5	4.5	4	1	10	50	70	"
533	3	D. F. Hudson	Little Popo Agie	3.5	7	4	1.5	4	600	230	1901
534	1	J. H. Fischer	Laramie River	7	12	8	2	5.28		770	1900
535	3	Henry A. Thurston	Grey Bull River	5	8	5	1	8	500	141	1901
536	1	F. M. Clauser	Little Laramie	1.5	5.5	4.5	1	3	300	108	"
537	3	H. A. Thurston	Grey Bull River	2.25	10	5	3	7	200	29	"

APPLICATIONS FOR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
538	3	Grant Yarnell	Grey Bull River	4	7	6	1	5.28	$ 300	105	1901
539	4	Lizzie E. Allen	East Fork New Fork	4.5	6	4	2	27	800	415	1902
540	3	Peter Fleming	Wood River	2	8	6	2	81	150	50	1901
541	3	Jos. Brown	Grey Bull River	2	9	9	2	8	300	160	1900
542	2	Martha J. Brown	North Fork Powder River	2.5	7	5		5	700	160	1901
543	1	W. A. Denecke	Bates Cr	3	10	7	1.5	16	300	345	"
544	1	Tom Garrett	North Laramie River	1	6	5	1	3	300	52	"
545	3	F. E. Wood	Grey Bull River	4.5	8	8	2	6	250	1,766	1900
546	3	S. H. Cockins	" " "	3.75	10	8	1	5.6	200	886	1901
547	4	Nellie Ball	Cottonwood Cr	.5	6	5	1	16	75	90	"
548	4	" "	" "	3.5	8	6	1	10	72		1902
549	3	Bertie Yates	Grey Bull River	1	4	3	1	8	50	20.33	1901
550	4	D. A. Rowe	Cedar Cr	3.5	7	6	1.5	13	100	320	1900
551	4	Oscar Johnston	Green River	3	12	10	1	4	1,000	308	1902
552	3	A. P. Battrum	Little Popo Agie		5	4	2	9.5	250	110	1900
553	3	Frank A. Grace	Grey Bull River	2.5	12	10	1	6	400	92	"
554	1	R. W. Darst	Dry Laramie River	1.25	6	4	1	10	60	80	"
555	1	F. M. Parker et al	Big Laramie River	13	6	6	1	5	150	160	"
556	3	Clara Trepus et al	Grey Bull River	3.25	7	6	1	8	500	280	"
557	1	C. P. Arnold et al	Little Laramie River	3.5		12	1.5	4	400	340	1901
558	2	J. O. and J. R. Morgareidge	North Fork Powder River	2.812	8	7	1.5	5	1,000	408	1899
559	4	Wm. J. Gheen	Little Twin Cr	1.75	6	5	1	8	450	250	1900

APPLICATIONS FR ENLARGEMENT—*Continued.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
560	3	Aara J. Knisely et al	Stinking Water River	.75	20	15	1	6	$ 1,500	787	1900
561	1	Mary Houghton	Antelope Cr	3	7	5	1	5	400	210	1901
562	2	Uree D. Horr	Deadwood Cr	.5	4	3	1	8	75	6	1900
563	1	M. O'Rourke	Muddy Cr	1	3	2.5	1		125	74	1901
564	3	F. G. Slack et al	Grey Bull River	3.75	8	6	2	7	400	366	1900
565	4	Fred Lovejoy	Gros Ventre River	1.25	4	3	1	5.28	200	160	"
566	4	Alma J. Vail	Baxter Cr	1	4	3.5	.66	10	40	40	"
567	2	Thos. Coppinger	Beaver Cr	1.168	6	3.5	1	6	100	30	"
568	2	E. B. Williams	Piney Cr	10	4.5	3.5	1.5	5.3	1,000	430	1902
569	3	Emanuel Faust	Grey Bull River	4	15	7	4	5	100	630	1900
570	3	J. A. Winslow	" " "	10	8	1	5	6	100	120	1901
571	3	A. W. Winslow	" " "	4	10	8	1	5	100	39	"
572	3	B. F. Mercer	Medicine Lodge Cr	6.5	13	11	1.5	4.5	1,800	439	1902
573	3	J. W. Dilno	Grey Bull River	5.5	15	9	1	5	200	115	1901
574	4	Edward Overy	Smith's Fork Cr	1.25	4	3	1	3	30	90	"
575	1	G. A. Burg	Big Laramie River	3.5	12	8	2	2	1,000	2,132	1902
576	3	I. Dickinson et al	Grey Bull River	1.75	9	8	1	23.4	200	151	"
577	4	Geo. W. Walton	Stump Cr	5	10	8	1.5	20	300	245	1901
578	4	A. T. McLaughlin	Smith's Fork	3		6	1.5	5	150	160	"
579	4	Pauline Noble	West Fork of New Fork	1	4	3	1.5	6	500	110	"
580	4	Ella Holden	Fontenelle Cr	1	12	10	2		300	258	1902
581	4	J. M. Wells et al	Crow Cr	2	11	9	1	14	100	280	1901

APPLICATIONS FOR ENLARGEMENT—*Concluded.*

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Dimensions					Estimated Cost	No. of Acres	Date for Completion
				Length in Miles	Width		Depth	Grade, Feet per Mile			
					Top	Bot'm					
582	4	J. Budd et al	North Piney Cr.	8	7	5	1	48	$ 600	970	1900
583	4	H. W. Burdick	LaBarge Cr.	7.5	10	8	1.5		500	175	1901
584	4	Rasmus Nickelson	" "	3.5	5	4		3	50	160	"
585	1	Alice R. Peryam	Grand Encampment River	.176	3	2	1.25	10	25	100	1900
586	4	George Hartley	Horse Cr.	5	12	10	2.5	20	400		1901
587	1	Jos. Heward	Muddy Cr.	2	8	7	2.5		160	300	1900
588	3	Morgan Thomas	Rawhide Cr.	1.127	6	7	1.5	50	128	300	1901
589	4	Harvey H. Hittle	East Fork New Fork	1.25	4	3	1	5	160	500	1902
590	4	Elizabeth McNish	Duck Cr.	1.5	6	5	1	5.6	180	100	"
591	2	John A. Jones	Spring, Sec. 11, T. 50, R. 82	.75	6	4	1	5.28	108	500	1901
592	2	Lydia Clelland	LaPrele Cr.	2	5	3	1	5.28	129	250	1902
593	2	J. H. Kennedy	" "	2.375	6	4	1.25	4.5	89	300	1904
594	4	D. C. Swartfoger	Black's Fork River	1	8	6.5	1.5	8	320	150	1901
595	3	Laura Bragg et al	Deep Cr.	14	11	8	1.5	10	445	2,000	1903
596	1	Ed. S. White	Red Cr.	2	6	4	1	16	190	300	1902
597	3	John Lewis	Ten Sleep Cr.	5.5	10	8	1.5	3	170	1,000	1903
598	3	Jacob Greenwold	South side Grey Bull	2.5	10	6	2	5	1,000		1901
599	4	John Stacey	Bear River	1					320	150	1902
600	1	Kate McFarlane	Davidson Cr.	1	4	3	1	5	85	300	1901
601	3	A. L. Coleman	Deep Cr.	7	6	4	1.5	10	130	113	1900
602	1	A. J. Goetz	North Fork Sage Cr.	2.5	5	3	1	5.5	300	81	1902
603	2	Lenard Burger	Md. Fork Powder River	2	6	4	1	5.28	500	96	1901

TABLE

GIVING CERTIFICATES OF APPROPRIATION ISSUED BY THE STATE BOARD OF CONTROL BETWEEN NOVEMBER 30, 1898, AND NOVEMBER 30, 1900.

WATER DIVISION NO. 1.

SPRING CREEK—Carbon County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
1	Kuykendall No. 3	W. L. Kuykendall.....	486	Summer '82	Irrigation	1.43	100
2	Short Line Ditch	J. H. and C. Crawford...	"	March 1888	"	0.21	15
3	Crawford Ditch.....	Carrie Crawford.....	"	Sept. 18 '89	"	1.45	100

NORTH SPRING CREEK, Tributary of Spring Creek.

1	Kuykendall No. 1.....	W. L. Kuykendall.....	486	May 1882	Irrigation	1.43	100

North Spring Creek—*Continued.*

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
2	Methodist Creek Ditch ...	Alex. McPhail.....	486	Summer '84	Irrigation	0.85	60
3	Harnes	M. and H. W. Haines ...	"	July 26 '84	"	22.80	1,600
4	Douglass	John M. Douglass	"	May 1 1885	"	1.71	120
5	Swazey's North Spring...	Edward L. Swazey.....	"	May 24 1885	"	5.00	350
6	Methodist Creek	Alex. McPhail	"	1886	"	10.57	740
7	Cherokee	S. C. Rhodes et al.....	"	July 1886	"	1.28	90
8	Crooked	Jos. E. Page et al.....	"	March 1887	"	3.43	240
9	White	White & Atfield.....	"	May 1 1890	"	0.71	50
10	Cherokee.....	S. L. Rhodes.....	"	June 18 '91	"	2.28	160
10	"	James Deegan.....	"	"	"	1.71	120
10	"	Alex. McPhail	"	"	"	2.28	160
9	Western Ditch	M. and H. Haines	487	April 1884	"	2.57	180
10	Central Ditch.....	M. and H. Haines	"	May 1 1884	"	0.57	40
11	North Side Ditch	Hattie S. Swazey	"	May 3 1884	"	3.43	240
12	Lats from Wagoner 3....	David Foutz.....	"	Summer' 84	"	0.17	12
13	S. Spring Cr. Irr. Ditch..	Frank Williams et al	"	Jan. 1885	Stock, Dom'stic, irr.	17.00	1,120
13	S. Spring Cr. Irr. Ditch ..	Chas. S. Miner	"	" "	Irrigation	1.14	80
14	Wagoner No. 1.....	Mary E. Hoyt et al	"	Early in '85	"	1.90	135
15	Eastern Ditch	H. W. and M. Haines....	"	April 1885	"	2.28	160
16	Foutz Ditch.....	David Foutz	"	May 1886	"	0.57	40
17	Miner No. 5.....	Chas. S. Miner	"	Sept. 1 1886	"	0.36	25
18	Wagoner No. 2.....	Mary E. Hoyt et al	"	1888	"	2.28	160

North Spring Creek—*Concluded.*

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
19	Brubaker No. 2	Robt. E. Cowan	487	May 21 '88	Irrigation	2.28	160
20	Monroe Ditch	White & Monroe	"	April 15 '89	"	0.85	60
21	Foutz Nos. 1 and 2	David Foutz	"	"	"	0.71	50
22	Cannon Ditch	Garber & Bashol	"	May 20 '90	"	1.00	70
23	S. Spg. Cr. Irr. Co. Ditch.	S. Spring Irr. Co.	488	1890	"	13.71	960
23	Wagoner No. 3	Mary E. Hoyt et al	"	"	"	0.07	5
23	Wagoner No. 3	Samuel Monroe	"	"	"	0.43	30
10	Cherokee	E. J. Foutz	486	June 18 '91	"	2.28	160
10	"	Alex. McPhail	"	"	"	5 71	400
10	"	James Deegan	"	"	"	3.36	235
10	"	S. L. Rhodes	"	"	"	2.07	145

East Branch of South Spring Creek.

1	Ewett Ditch	James W. Heather	488	Feb. 12 '85	Stock, domestic, irr.	2.14	80
2	Ewett Ditch, 2nd App'n.	James W. Heather	"	1888	Irrigation	9.71	680

Bates Creek, Tributary of North Platte River.

26	Place & Crouse	Fred E. Place	511	May 30 '96	Irrigation	7.92	555
26	Place & Crouse	Jake Crouse	"	"	"	4.64	325

SOUTH SPRING CREEK, Tributary of Spring Creek.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
1	Wagoner No. 2	John Wagoner et al	487	July 1 '79	Irrigation	0.14	10
2	Wagoner No. 1	" " "	"	July 20 '79	"	0.14	10
3	Monroe No. 1	Samuel Monroe	"	July 1880	"	1.14	80
4	Miner No. 1	Chas. S. Miner	"	April 15 '81	"	0.57	40
5	Miner No. 2	" " "	"	April 20 '81	Irrigation, domestic	1.25	80
6	Kuykendall No. 2	W. L. Kuykendall	"	Summer '82	Irrigation	2.85	200
7	Wagoner No. 3	Mary E. Hoyt et al	"	July 1 1882	"	1.71	120
8	Swazey's Ditch	Edward L. Swazey	"	Aug. 1 '82	"	1.43	100

METHODIST CREEK, Tributary of North Spring Creek.

1	Deegan No. 1 Ditch	James Deegan	487	June 15 '94	Irrigation	0.85	60
1	Deegan No. 2 Ditch	James Deegan	"	"	"	1.42	100

CENTENNIAL CREEK, Tributary of South Spring Creek.

1	Centennial Ditch	Edgar F. Grout	487	Spring '79	Irrigation	1.71	120
2	Miner's Nos. 3 and 4	Miner & Foutz	"	May 1882	"	0.28	20
3	Miner's Nos. 3 and 4	Miner & Foutz	"	Summer '88	"	0.21	15
4	Centennial Ditch	Edgar F. Grout	"	Nov 25 '92	"	4.28	300

DEER CREEK, Tributary of Pass Creek—Carbon County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
8	Mattson Ditch.....	August Mattson.....	501	Nov. 4 '97	Irrigation	2.28	160
	ROCK CREEK, Tributary of North Platte River.						
38	Canon Ditch	Margaret Dixon	535	April 1897	Irrigation	3.71	260

TABLE

GIVING CERTIFICATES OF APPROPRIATION ISSUED BY THE STATE BOARD OF CONTROL BETWEEN NOVEMBER 30, 1898, AND NOVEMBER 30, 1900.

WATER DIVISION NO. 2.

LYTLE CREEK, Tributary of Belle Fourche River—Crook County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 / Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
2	Ryan-Baird C. Co.....	John C. Ryan	507	June 10 '96	Irrigation	3.00	210
	REDWATER CREEK—Crook County.						
3	Jan Moller Ditch.....	Fred Burnett	515	Jan. 21 '98	Irrigation	.57	40

SOUTH REDWATER CREEK, Tributary of Redwater Creek.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
13	Powell & Davis Ditch...	Chas. A. Scott.....	507	April 19 '93	Irrigation	2.14	150
		A SPRING, Tributary to Redwater Creek.					
16	Stark Ditch.....	J. E. Haines	507	April 2 '96	Irrigation	0.04	3
		A SPRING, Tributary to South Redwater Creek.					
1	Rhodie Ditch	A. M. Hemler	515	Dec. 9 '95	Irrigation	0.14	10
		SAND CREEK, Tributary of Redwater Creek.					
7	Benton & Avery.....	Benton & Avery	215	June 2 '95	Irrigation	1.14	80
		SAND CREEK, Tributary of Belle Fourche River.					
8	Rimicke Ditch	Jane Huxley	542	June 12 '95	Irrigation	0.03	2

SPRINGS, Tributary to Bear Run—Weston County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
1	Bear Run Ditch.....	Coates & Fawcett.....	542	Oct. 10 '95	Domestic, irrigation	0.92	65
		SOUTH FORK OF BEAR RUN.					
1	South Fork Ditch	W. E. Keyes	542	Oct. 22 '97	Domestic, irrigation	0.34	24
		LITTLE OIL CREEK, Tributary of Oil Creek.					
	M. J. Coyle Ditch.....	M. J. Coyle	542	May 31 1897	Irrigation	1.50	110
		SPRINGS OF OIL CREEK.					
1	Oil Creek Ditch.....	Zedick W. Freel	542	June 4 '97	Domestic, irrigation	1.47	103
		SEEPAGE WATER, Tributary to Rock Creek—Johnson County.					
31	Arroyo Ditch.....	Mary P. W. Bacon.....	515	Dec. 31 '98	Irrigation	0.28	20

CROSS CREEK, Tributary of Big Goose Creek—Sheridan County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
67	Mountain Supply	Colorado Colony.....	495	June 15 '99	Supplemental Irrigation		6,320
		RAPID CREEK, Tributary of Big Goose Creek.					
2	Addleman No. 1.....	Maggie E. Addleman....	507	Mch. 12 '97	Irrigation	1.07	75
		WHITE CREEK, Tributary of Little Goose Creek.					
51	White Water Ditch	John S. Benton.....	499	May 6 '95	Irrigation	0.85	60
		JACKSON CREEK, Tributary of Little Goose Creek.					
56	Robinson Ditch.....	L. E. Martin.....	499	Jan. 25 '98	Irrigation	0.01	1
		LITTLE GOOSE CREEK, Tributary of Big Goose Creek.					
57	Colorado Ditch	R. Cornwall.....	515	July 1 '98	Irrigation	0.50	35

BEAVER CREEK, Tributary of Big Goose Creek.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
57	Scaramellini Ditch	Wm. Scaramellini	515	July 1 '98	Irrigation	3.14	220

BIG GOOSE CREEK, Tributary of Tongue River—Sheridan County.

59	Peralto Ditch.....	Eliza Hurlbut	541	Mar. 8 '97	Irrigation	0.78	55
65	Beck No. 9	W. Thompson.....	"	Aug. 16 '98	"	0.47	33

SEEPAGE, Jackson Creek, Tributary of Little Goose Creek.

58	Benton & Crogan.....	Benton & Crogan.....	541	Jan. 7 '99	Irrigation	1.07	75

HANNA CREEK, Tributary of Little Goose Creek.

53	Hay No. 2	R. M. Hays	541	Mar. 8 '97	Irrigation	0.21	15

SPRING, Tributary of Little Goose Creek.

53	Hay No. 1.....	R. M. Hays	541	Mar. 8 '97	Irrigation	0.30	21

WOLF CREEK.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
22	Stewart Ditch	Chas. S. Decker	541	Mar. 28 '97	Irrigation	1.50	110
	Tributary of Wolf Creek.						
23	Cutter Ditch	Geo. H. Cutter	541	June 26 '97	Stock, domestic, irr.	0.45	32
	FIVE MILE CREEK, Tributary of Tongue River.						
4	Westlake Ditch	Geo. W. Westlake	541	Mar. 18 '99	Irrigation	0.64	45
	BRANCH OF FIVE MILE CREEK, Tributary of Tongue River.						
2	Owen Ditch	Owen Bros.	541	Mar. 25 '96	Irrigation	4.80	336
	SOUTH PINEY CREEK, Tributary of Clear Creek.						
36	Brooks' Lateral	E. J. Brooks	541	Jan. 8 '97	Irrigation	0.28	20
58	West Side Enlargement	W. H. Babione	"	Dec. 27 '97	"	0.78	55

Big (or South) Piney Creek—Sheridan County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
52	W. J. D. Enlargement.	Samuel Dickey.....	499	Jan. 7 '96	Irrigation	0.71	50

Murphy Gulch, Tributary of Prairie Dog Creek.

8	Stroud & Stout	T. A. Stout.....	541	June 19 '97	Irrigation	0.50	35
8	Stroud & Stout	C. B. Stroud.....	"	"	"	0.50	35

Wagner Creek, Prong of Dutch Creek, Tributary of Prairie Dog.

1	Sickler Ditch	H. E. Sickler.....	541	June 10 '96	Stock, irrigation	0.64	45

Dutch Gulch, Tributary of Prairie Dog Creek.

2	Arno Ditch.....	Wm. Symonds.....	541	Nov 4 '97	Stock, irrigation	1.92	135

Jennings Gulch, Tributary of Mead Creek, Tributary of Prairie Dog.

3	Bard Ditch.....	Minerva E. Bard.....	541	Jan. 9 1900	Irrigation	1.07	75

SOUTH FORK OF CRAZY WOMAN CREEK—Johnson County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 / Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
	Bank Ditch.....	Fred Waegele	541	July 6 '96	Domestic, irrigation	0.19	13.4
	STEELE CREEK, Tributary of South Fork of Crazy Woman Creek.						
1	Pen Ditch.....	Fred Waegele	541	July 6 '96	Domestic, irrigation	1.45	102
	HAY CREEK—Crook County.						
6	Swan Ditch.....	John Pearson.....	533	June 10 '97	Irrigation	1.00	74
	HILMAN CREEK, Tributary of Belle Fourche River.						
1	S. Hilman Ditch	Lydia Hilman	541	Aug. 20 '96	Irrigation	0.88	62

TABLE

GIVING CERTIFICATES OF APPROPRIATION ISSUED BY THE STATE BOARD OF CONTROL BETWEEN NOVEMBER 30, 1898, AND NOVEMBER 30, 1900.

WATER DIVISION NO. 3.

BROKENBACK CREEK, Tributary of No Wood River, Big Horn County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
9	Williams, Extension	W. R. and H. Williams .	513	Aug. 30 '97	Irrigation	1.07	75
	TEN SLEEP CREEK, Tributary of No Wood River.						
12	Standard Ditch	Margaret McCreery	513	Oct. 19 '95	Irrigation	0.95	67
13	Victoria Ditch.....	David Moses	"	Nov. 22 '95	"	0.65	45
13	Victoria Ditch.....	Samuel A. McLaughlin ..	"	"	"	0.71	50

Owl Creek, Tributary of Big Horn River.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
1	Kirby Ditch	Owl Creek L. S. Co.	528	Spring '80	Stock, domestic, irr.	2.37	165
2	Owl Ditch	Embar Cattle Co.	"	1880	" " "	5.48	382.7
3	Garden Ditch	John L. McCoy	"	1882	Irrigation	0.57	40
4	Sliney & Mikkelson	H. P. Rothwell L. S. Co.	"	Oct. 1884	"	2.20	154.6
4	Sliney & Mikkelson	Geo. M. Sliney	"	" "	"	3.19	222.6
5	Cagney Ditch	F. L. Jones	529	Fall 1885	"	2.55	178.7
6	McCoy Ditch	John L. McCoy	"	Nov. 14 '85	"	1.64	114.8
7	Short & Heiden	Christian Heiden	"	Spring 1886	"	0.35	25
7	L. Short & Heiden	L. and B. Short	"	" "	"	0.28	20
8	McCulloch Ditch	Embar Cattle Co.	"	Spring 1887	"	0.85	59.1
9	Padlock Ditch	Geo. M. Sliney	"	June 1887	"	3.60	252
9	Padlock Ditch	Rothwell L. S. Co.	"	" "	"	7.86	550.7
10	Price & Landis Ditch	Embar Cattle Co.	"	April 1888	"	7.29	509.2
11	Cusack Ditch	Edmund Cusack	"	June 1888	"	2.70	189
12	Simmerman Ditch	L. J. Simmerman	"	Oct. 1888	"	2.56	179.2
13	McManus Ditch	A. McManus	"	Spring 1889	"	0.28	20
14	Shæffer & Nielson	J. P. Nielson	"	1889	"	0.71	50
15	Pardee Ditch	Anchor Cattle Co.	"	May 1890	Stock, domestic, irr.	1.13	78.6
16	Dempsey Canal	Edmund Cusack	"	Dec. 18 '94	Irrigation	1.64	115
17	Close & Bader	F. L. Jones	"	Feb. 21 '96	"	3.26	228.7
18	Winchester Ditch	R. A. Winchester	"	June 8 '96	"	0.78	55
19	Dempsey Canal	Thos. Hume	530	Oct. 10 '97	"	2.50	175.9

Owl Creek—*Concluded.*

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2 Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
20	Pardee Ditch.....	Anchor Cattle Co.....	530	May 11 1899	Stock, domestic, irr.	1.19	83
		NORTH FORK OF OWL CREEK.					
1	Smith Ditch.....	Leonard Short.....	530	Spring 1882	Irrigation	0.87	61
2	Basin Ditch.....	Embar Cattle Co.....	"	May 1886	Stock, domestic, irr.	9.37	655
3	Short No. 3.....	Leonard Short.....	"	Nov. 1 1896	Irrigation	0.50	35

TABLE

GIVING CERTIFICATES OF APPROPRIATION ISSUED BY THE STATE BOARD OF CONTROL BETWEEN NOVEMBER 30, 1898, AND NOVEMBER 30, 1900.

WATER DIVISION NO. 4.

SALT RIVER—Uinta County.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
28	Fairview Canal.....	John C. Dewey.....	482	July 10 '95	Irrigation	0.64	45
28	" "	Ole Swanson.....	"	"	"	0.78	55
21	North Canal Branch	Chas. Kingston.....	"	June 5 '95	"	.57	40
33	Salt River Canal	Chas. A. Johnson	503	June 2 '99	"	2.65	185

DRY CREEK, Tributary of Salt River.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
16	Henderson Ditch	Chas. Johnson	482	June 5 '95	Irrigation	1.28	90
21	Perkins & Hardman	George Hardman	"	July 29 '95	"	1.71	120
18	Hill Ditch	F. C. Meachin	504	June 29 '95	"	0.78	55
18	" "	R. G. Bowles	"	"	"	1.21	85
23	Swensen & Olesen	Jos. L. Nield	"	Feb. 21 '98	"	1.15	80

CROW CREEK, Tributary of Salt River.

15	Fairview Canal	Thos. Hood	482	July 10 '95	Irrigation	0.85	60
16	W. Br. Crow Cr. Canal	Eliza Clark	518	Nov. 12 '97	"	0.57	40

WILLOW CREEK, Tributary of Salt River.

4	Turner Ditch	W. A. Turner	502	Sept. 26 '94	Irrigation	1.15	80
4	" "	W. B. Izatt	"	"	"	0.57	40
4	" "	John Fluckigar	"	"	"	1.15	80
4	" "	J. A. Fluckigar	"	"	"	0.50	35
8	Hepworth Ditch	Mary E. Hepworth	"	May 26 '99	"	1.71	120
9	Willow Ditch	C. and E. Anderson	"	June 2 '99	"	0.57	40

SWIFT CREEK, Tributary of Salt River.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
20	Halling Ditch	B. L. Gardner	503	May 8 '95	Irrigation	1.15	80
20	Halling Ditch	Ozro Gardner	"	" "	"	2.28	160
21	North Canal	John Miles	"	June 5 '95	"	1.15	80
21	" "	L. C. Jensen	"	"	"	1.00	70
21	" "	John A. Hyde	504	"	"	1.71	120
21	" "	Jos. E. Hepworth	"	"	"	0.57	40
21	" "	Jens J. Jensen	"	"	"	0.85	60
21	" "	E. M. Thurman	"	"	"	2.57	180
21	" "	Fred Hale	"	"	"	1.15	80
21	" "	Austin C. Hyde	"	"	"	1.15	80
21	" "	Gibson A. Condie	"	"	"	0.40	28
21	" "	Carl C. Lowder	509	"	"	0.71	50
21	" "	Oley Anderson	"	"	"	1.42	100
21	" "	Christian Nelson	"	"	"	1.71	120
24	Lowder Ditch	Elizabeth A. Lowder	"	May 26 1899	"	1.15	80

COTTONWOOD CREEK, Tributary of Salt River.

17	Taggart Ditch	Carl Anderson	504	June 2 '99	Irrigation	0.21	15
18	Cregar Extension	F. P. Cranney	"	June 21 '99	"	3.43	240
18	Cregar Extension	H. K. Cranney	"	"	"	1.00	70

ANDERSON CREEK, Tributary of Salt River.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
1	J. C. D. Ditch	Chas. Johnson	504	June 10 '97	Irrigation	0.28	20

STRAWBERRY CREEK, Tributary of Salt River.

14	Grand Canal	Geo. G. Weaver	537	June 24 '95	Irrigation	1.17	80
14	" "	A. F. Bracken	"	"	"	1.85	120
14	" "	Roswell Dana	"	"	"	0.85	60
14	" "	J. W. Titensor	"	"	"	1.85	120
14	South End Ditch	S. D. Allen	"	"	"	0.57	40

BIRCH CREEK, Tributary of Salt River.

2	Wolfly Crouch Ditch	R. E. Wolfly	504	Aug. 15 '94	Irrigation	2.28	160

SPRING CREEK, Tributary of Salt River.

1	Roberts Ditch	David O. Roberts	537	Feb. 8 '95	Irrigation	2.38	160

LOST CREEK, Tributary of Salt River.

1	Mallory Ditch	Chas. H. Mallory	497	June 14 '93	Irrigation	6.85	480

BLACK'S FORK, Tributary of Green River.

Priority No.	NAME OF DITCH	NAME OF APPROPRIATOR	Recorded in Book 2, Page	Date of Priority	Use to Which Applied	Amount Appropriated, Cubic Feet per Second	Acres Irrigated
30	Wood Ditch.....	John Wood	518	July 30 '95	Irrigation	2.24	157

SMITH'S FORK, Tributary of Black's Fork.

29	Hyrum Strong No. 1.....	Hyrum Strong	518	Dec. 10 '96	Irrigation	0.75	53
29	Orson Strong.....	Orson Strong.....	"	"	"	1.81	127
30	Kidman-Wall Ditch	R. W. Kidman.....	"	Dec. 22 '96	"	1.97	138
31	Joseph Race No. 2.....	Joseph Race.....	"	May 7 1897	"	0.28	20

LA BARGE CREEK, Tributary of Green River.

27	Smith Ditch.....	Hyrum Smith.....	504	June 14 97	Irrigation	2.67	187

APPENDIX.

WATER LAWS AND AMENDMENTS TO SAME ENACTED IN 1901.

The following laws relating to the use of water were enacted by the Legislature of 1901:

RE-OPENING THE DECREES OF THE BOARD OF CONTROL IN CERTAIN CASES.

Section 1. The final orders or decrees of the State Board of Control, in the proceedings provided by law for the adjudication and determination of rights to the use of the public waters of the State, shall be conclusive as to all prior appropriations, and the rights of all existing claimants upon the stream or other body of water lawfully embraced in the adjudication, subject, however, to the provisions of law for re-hearings in such proceedings and for the re-opening of the orders or decrees therein and for appeals from such orders or decrees.

Section 2. Whenever the State Board of Control shall, as provided by law, proceed to adjudicate and determine the rights of the various claimants to the use of water upon any stream or other body of water, it shall be the duty of all claimants interested in such stream or other body of water to appear and submit proof of their respective appropriations, at the time and in the manner required by law; and any such claimant who shall

fail to appear in such proceedings and submit proof of his appropriations shall be barred and estopped from subsequently asserting any rights theretofore acquired upon the stream or other body of water embraced in such proceedings, and shall be held to have forfeited all rights to the use of said stream theretofore claimed by him. Provided, that any person claiming the right to the use of water of any stream heretofore adjudicated by the Board of Control who, having been or claiming to have been at the time an appropriator therefrom, shall have failed to appear and submit proof of his claim shall be permitted within one year after the passage of this Act, but not thereafter, to apply for a hearing and an adjudication of his rights in the manner hereinafter provided; and Provided, further, that any claimant upon whom no other service shall be made than by publication in the newspaper, of the notice of such proceedings and taking of testimony, may, within one year after the entry of the order or decree of the Board, determining the rights of the various claimants upon any particular stream or other body of water, have the same opened and be let in to give proof of his appropriation; but before the decree of the Board can be opened in such case, the applicant shall give notice to all other persons interested in the water of the stream or other body of water in question, and shall with his petition file the same kind of proof as required of claimants in original hearings and make it appear to the satisfaction of the Board that during the pendency of the proceedings he had no actual notice thereof in time to appear and make proof of his claim; and all parties interested may present affidavits as to the matter of actual notice of the applicant.

Section 3. Any person claiming the right to the use of water of any stream, heretofore adjudicated by the Board of Control, being or claiming to be an appropriator therefrom, who shall have failed to appear and submit proof of his claims at the time of the adjudication of the rights of the various claimants to the water of such stream, shall be permitted at any time within one year after the passage of this Act, but not thereafter, to file a petition with the Board of Control for a hearing in respect to his claims to the use of water from such stream, and for the re-opening of the decree heretofore entered for that purpose. Said petition shall embrace all the particulars required by law

in the proofs of claimants in original proceedings before the Board, and shall be verified by the oath of the claimant. Upon the filing of said petition, if it shall appear to the Board that the petitioner had not appeared in the proceedings and submitted proof of his claims, the State Board shall make and enter an order re-opening the decree heretofore entered, determining the rights to the use of water upon such stream, for the purpose of receiving the testimony on behalf of the petitioner and determining his rights to the use of such water. Thereupon the Division Superintendent of the proper Division shall fix a time and place for taking the testimony and shall give notice thereof as required by the provisions of Sections 861 and 862, of the Revised Statutes, 1899, in the case of original hearings. The petitioner shall, at the time of submitting his proof and testimony at such hearing, file a correct map of his ditch and the lands irrigated therefrom, Provided, that the hearings permitted by this section shall be subject to the same provisions of law as to inspection of testimony, contests and appeals, as in other cases.

PREVENTING OBSTRUCTIONS TO THE FLOW OF WATER IN IRRIGATING DITCHES.

Section 1. Any person, association or corporation desiring or intending to drive or float logs, timber or lumber down or upon any stream in this State shall before commencing operations apply to the State Engineer for a permit to drive or float the same. Such application shall be in writing and shall state that the driving of such logs, timber or lumber will be conducted with all possible expedition and in such manner as not to interfere with or injure any irrigating ditch or other property along the stream on which said drive is to take place and the applicant shall, if required by the State Engineer, give bond to the State of Wyoming in such sum as the State Engineer may deem sufficient, conditioned for the conducting of said drive without delay, and for the protection of the owners of irrigating ditches and property along the stream whereon said drive is to be made. When said permit is issued, the said applicant may proceed to conduct said drive upon the stream or streams therein mentioned; Provided, however, that no permit shall be granted allowing any

logs, timber or lumber to be left in or upon any stream so as to be frozen in during winter.

REGULATING THE DRIVING OR FLOATING OF LOGS, TIMBER OR LUMBER ON STREAMS.

Section 1. If any person or corporation engaged in floating or driving logs, timber or lumber down or upon any stream in the State of Wyoming, shall purposely or negligently cause or suffer any logs, timber or lumber so floated or driven to obstruct or interfere with the free and unobstructed flow of water into or through any irrigating ditch without the consent of the owner thereof, or to interfere with the lawful use of water by the owner thereof, for irrigating purposes, shall on conviction thereof be fined in any sum not less than one hundred dollars nor more than one thousand dollars, said fines to be paid into and for the benefit of the Common School Fund of the County in which such obstruction takes place.

AMENDMENTS.

The following amendments to laws already in force were also passed, the amended sections retaining the same numbers as in the Revised Statutes:

RELATING TO DUTIES OF WATER COMMISSIONERS.

Section 891. Said Water Commissioner shall, as near as may be, divide, regulate and control the use of the water of all streams within his district by such closing or partial closing of the headgates as will prevent the waste of water, or its use in excess of the volume to which the appropriator is lawfully entitled, and any person who may be injured by the action of any water commissioner, or by his failure to act pursuant to this chapter, shall have the right to appeal to the division superintendent, and from his decision the party aggrieved may appeal to the State Engineer. And from the decision of the State Engineer in said matter, an appeal may be had to the District Court of the County wherein the ditch or ditches over which the controversy arises are situated.

Section 894. Said Water Commissioners shall begin their work at the written call of two or more appropriators, owners or managers of ditches. Said Water Commissioners may begin at the written call of one appropriator, owner or manager if the reasons given for the same are deemed sufficient by the Commissioner.

DUTIES AND POWERS OF THE STATE BOARD OF CONTROL.

Section 865. Upon the date named in the notice provided for in the preceding section, the Division Superintendent shall begin the taking of said testimony and shall continue until said testimony shall be completed; provided, that in case the Division Superintendent of any water division is directly or indirectly interested in the water of any stream of his division, or is prevented by illness or other disability from the taking of such proofs, the taking of evidence so far as relates to said stream shall be under the direction of the Division Superintendent of the next nearest water division or under the direct personal supervision of the State Engineer as may be deemed by the Engineer the most expedient. Provided, that in the taking of proofs of appropriation of water made under a permit issued by the State Engineer, such permits having been issued subsequent to the adjudication of the waters of the stream from which the appropriation is made, the Superintendent may, in his discretion, authorize the water commissioner of the district in which the appropriation is made, to take such proofs. Upon the taking of the proofs so ordered, the Water Commissioner shall at once forward them to the Division Superintendent. The Water Commissioner shall take no proofs except those specifically ordered by the Division Superintendent. Provided, further, that upon taking such proof the Water Commissioner shall be paid for such work out of the contingent allowed the Division Superintendent in whose district such work is done.

RELATING TO THE CONSTRUCTION OF HEADGATES AND MEASURING DEVICES IN DITCHES AND STREAMS.

Section 930. The appropriator of any of the public waters of the State shall maintain, to the satisfaction of the Division Superintendent of the district in which the appropriation is

made, a substantial headgate at the point where the water is diverted, which shall be of such construction that it can be locked and kept closed by the water commissioner; and such appropriator shall construct and maintain, when required by the Division Superintendent, a flume or measuring device, as near the head of such ditch as is practicable, for the purpose of assisting the water commissioner in determining the amount of water that may be diverted into said ditch from the stream. And every owner or manager of a reservoir, located across or upon the bed of a natural stream, shall be required to construct and maintain, when required by the Division Superintendent, a flume or measuring device of a plan to be approved by the State Engineer, below such reservoir at a point not to exceed 600 feet therefrom, and a flume or measuring device above such reservoir on each and every stream or source of supply discharging into such reservoir, for the purpose of assisting the water commissioner or superintendent in determining the amount of water to which prior appropriators are entitled and thereafter diverting it for such prior appropriators' use.

If any appropriator of public waters that have been adjudicated upon, should refuse or neglect to construct and put in such headgate, or measuring device, after ten days' notice to do so by the Division Superintendent, it shall be the duty of the Water Commissioner of the district in which such headgate is located, on order of the Division Superintendent, to close such ditch to the passage of water, and the same shall not be opened or any water diverted from the source of supply, under the penalties prescribed by law for the opening of headgates lawfully closed, until the requirements of the Division Superintendent as to such headgate or measuring device have been complied with, and if any owner or manager of a reservoir located across the bed of a natural stream shall neglect or refuse to put in such measuring device after ten days' notice to do so by the Division Superintendent, the Water Commissioner shall open the sluice gate or outlet of such reservoir and the same shall not be closed under penalties of the law for changing or interfering with headgates, until the requirements of the Division Superintendent as to such measuring device are complied with.

UNLAWFUL INTERFERENCE WITH WATER RIGHTS.

Section 971. Any person who shall wilfully open, close, change or interfere with any headgate or water-box without authority, or who shall wilfully use water or conduct water into or through his ditch which has been lawfully denied him by the Water Commissioner or other competent authority, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be fined in a sum not exceeding one hundred dollars or imprisonment in the county jail for a term not exceeding six months, or by both such fine and imprisonment; (and the possession or use of water when the same shall have been lawfully denied by the Water Commissioner or other competent authority shall be deemed prima facie evidence of the guilt of the person using it.)

RELATING TO BRIDGES ACROSS DITCHES.

Section 1959. Any person, company, corporation or association of persons, operating or maintaining in whole or in part, either as owners, agent, occupant or appropriator any ditch, canal or water course, not being a natural stream, for irrigation or any other, and different purpose, shall put in, construct, maintain and keep in repair at his, her, its or their expense, for one year, where the same crosses any public highway or publicly traveled road, a good substantial bridge, not less than fourteen feet in width, over such ditch, canal or water course where it crosses such road. Any violation of the provisions of this section shall be a misdemeanor, and upon conviction thereof, the person so offending shall pay a fine in a sum not exceeding one hundred dollars for each day such ditch, canal or water course shall be unbridged, insufficiently bridged, or suffered to remain out of repair. Provided, that after the expiration of one year from the construction of said bridge, the road supervisor of the road district in which said bridge is located shall, upon being notified by the owner or owners of the ditch, canal or water course over which such bridge is constructed, at once inspect such bridge, and if found in a good and lawful condition, shall accept the same for the county in which it is located, and said bridge shall thereafter be maintained by the said county.